Annotated Bibliography*

*Note: see second part of Bibliography for items not yet annotated.

10051297Z5

Source: https://www.industrydocuments.ucsf.edu/docs/pmk0000

Anderson, J.M. & C. Brown, C.N. A study of the effects of smoking upon grip strength and recuperation from local muscular fatigue. Res. Quart. Amer. Ass. Hlth., 1951, 22, 102-108.

FINDINGS

Smoking one cigarette made no difference

ADAPTED FROM SECONDARY SOURCE: Psychol. Abstr.

100512976

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Andrews, W.R. Smoking and scholarship. School and Society, 1921, 13, 646.

In a letter to the editor, Andrews criticizes a study of smoking and non-smoking high school students published in an earlier issue of The Literary Digest. He suggests that the better performance on mental tests and the higher scholastic attainment of nonsmokers might be due to one or more of the following factors, rather than to the direct effects of tobacco:

(1) The greater mental ability of the nonsmokers.

(2) The greater self-control, more studious habits, and better moral fiber of the nonsmokers, resulting in a refusal to "drift with the current" and smoke.

(3) The absence in the nonsmokers of other habits, negatively related to scholarship, that are probably found in smokers.

Andrews expresses the opinion that "smoking alone would tend to quiet the nerves and aid in mental attainment for a limited time."

1005129777

Source: https://www.industrydocuments.ucsf.edu/docs/hnnf0000

Apperson, G. L. The social history of smoking. London; Martin Secker, 1914 (255 pp.)

PURPOSE

To write the history of smoking in England from the social point of view, emphasizing "fluctuations in fashion" and "changes in the attitude of society" toward use of tobacco and the forms in which it is consumed.

METHOD

Analysis of historical documents, and literary references to tobacco.

FINDINGS

The author traces the introduction of tobacco and pipe smoking into England, its rise to fashion in the 17th century, its decline with the appearance of snuff in the 18th century, the renaissance of smoking in the 19th century in the form of the cigar and the cigarette. Two chapters are devoted to changes in fashion regarding smoking by women and smoking in church.

COMMENTS

This work is a prime source for material on the history of smoking in England. There is little discussion of the use of tobacco elsewhere in the world. No bibliography is provided.

2005129728

Source: https://www.industrydocuments.ucsf.edu/docs/rmnk0000

Barach, A., Eckman, M. & Molomut, N. Modification of resistance to anoxia, with special reference to high altitude flying. Amer. J. Med. Sci., 1941, 202, 336-341.

FINDINGS

Emotional control and judgment are impaired by mild degrees of anoxia. The paper discusses anoxia as a result of carbon monoxide poisoning from inhaling tobacco smoke.

ADAPTED FROM SECONDARY SOURCE

Psychol. Abstr.

1005129729

Source: https://www.industrydocuments.ucsf.edu/docs/fnmk0000

Bates, R.L. The effects of cigar and cigarette smoking on certain psychological and physiological functions. J. Comp. Psychol., 1923, 3, 37-50.

PURPOSE

To determine the effects of smoking on responses to word association tests.

SUBJECTS

Six students at Johns Hopkins University.

METHOD

Subjects were given two word association tests -- the first nine minutes before smoking, the second six to twenty minutes after smoking. In response to a stimulus word, each subject gave the succession of words that came to his mind for a three minute period. Data were collected for five to ten sessions with each subject over a period of ten days.

FINDINGS

For five of the six subjects, the total number of words after smoking exceeded the total number before smoking, and showed a more uniform rate of association (of "steadier work") after smoking.

COMMENTS

As the experimenter himself acknowledges, there was no control series.

1005129780

Source: https://www.industrydocuments.ucsf.edu/docs/mnk0000

Baumberger, J.P., & Martin, E.G. Fatigue and efficiency of smokers in a strenuous mental occupation. J. Industrial Hygiene, 1920, 2, 207-214.

PURPOSE

To investigate the effects of tobacco on mental efficiency in a work situation.

SUBJECTS

Twelve male and two female telegraph operators in a large city telegraph office. Seven of the men were classed as heavy smokers, five were light smokers, and the two women were nonsmokers.

METHOD

Hourly output of each subject was recorded for three days. Corrections were made for number of messages sent or received, length of messages, wire trouble, slack business, rest and lunch periods. Correction for individual differences in speed and skill was made by using the percentage of the operator's grand arithmetic mean for all hours as the index of hourly output.

FINDINGS

"The heavy smokers start their work at a much higher rate than the light smokers; they fall below the light smokers during most of the hours of the day; and they are working at a much slower rate than the light smokers at the end of the day." It must be remebered that this statement is not a comparison of absolute output but of output relative to the worker's own average output.

Heavy smokers tended to handle less than their share of messages during peak business hours.

"If the data on which we base our conclusions are representative, they establish two respects in which heavy smokers fail to maintain the level set by light smokers in a strenuous mental occupation, namely, in a lessened ability to sustain output to the end of the working day, and in a diminished power to react by increased effort to an increase in the volume of business."

COMMENTS

In explaining their choice of a work group for study, the investigator's argue that the findings by Meylan (1910) suggest that "a classification on the basis of smoking habit may have the objection that the resulting grouping is really of the sociable as contrasted with the more studious and purposeful type of mind. . . . It is difficult to select any group for study to which criticism of this sort might not be applied, but to our minds an industrial group is likely to be as free from it as any that could be selected."

The high performance of the heavy smokers during the first hour of the work-day and the subsequent decline of output might be due to the effects of stimulation and withdrawal. The data do not show individual performance after rest and lunch periods. Such information might help to support or refute this explanation.

Hull (1924, pp. 14-15) reports that Baumberger and Martin used incorrect methods of computation. Reanalyzing the data, Hull finds very high efficiency for the heavy smokers during the first hour, high efficiency for the light smokers during the sixth hour, and no significant difference for the other hours or for the day as a whole. The primary reason for low statistical reliability is the small number of subjects.

1005129781

Source: https://www.industrydocuments.ucsf.edu/docs/jwfc0000

Binet, L. & Zamfir, C. Les effets du tabac. Presse méd., 1931, 39, 1283-1234.

PURPOSE

To investigate the effects of tobacco on the central nervous system.

SUBJECTS

Stickleback fish.

RESULTS

A conditioned reflex was established. With a solution of nicotine in the water the reflex was absent. Restored to normal water the reflex reappeared.

1005129782

Source: https://www.industrydocuments.ucsf.edu/docs/mrkp0000

Boldyreff, E.B. On the hyperglycemic effect of tobacco smoking. Amer. J. Physiol., 1935, 113, 13 (Abstract of a paper presented at the Amer. Physiol. Soc., April 1935).

PURPOSE

To determine whether it is nicotine or some other substance that produces the hyperglycemic effect of tobacco smoking.

SUBJECTS

Unspecified numbers of dogs, turtles, and humans.

METHOD

Administration of pure nicotine and of nicotinic acid (the oxidation product of nicotine), followed by measurements of blood sugar and other physiological characteristics.

FINDINGS

Nicotine had no effect on blood sugar

Nicotinic acid produced a mild hypoglycemic effect, with an increase of muscular sensitivity, a decrease of body temperature, and a decrease in the heart rate also noted.

"Thus, it seems that the increase of blood sugar caused by tobacco smoking should be attributed to other factors than nicotine or its oxidation product."

COMMENTS

See also the studies by Lundberg and Lundberg (1931), Haggard and Greenberg (1934), and Dill, Edwards, and Forbes (1934).

1005129783

Source: https://www.industrydocuments.ucsf.edu/docs/hanb0000

Boston Medical and Surgical Journal. The use of tobacco by schoolboys. Boston Med. & Surg. J., 1909, 161, 94.

An editorial comments on some possible explanation of the observed relationship between smoking and scholarship:

"No doubt many more boys than girls are backward in their studies, for the reason that girls are more docile, have fewer distracting interests in the form of play, and before adolescence are naturally brighter than boys."

"There is at least the arguable possibility that the boy-smoker is not dull because he smokes, but smokes because he is dull, or rather that his desire to smoke and his failure at school are common products of a truant disposition, concurrent symptoms of a fundamental temperamental defect."

1005129784

Source: https://www.industrydocuments.ucsf.edu/docs/jnhp0000

Bothwell, P.W. Cigarette smoking in school. Lancet, 1957, 1, 685.

A letter to the editor reports that preliminary findings of a study of 9500 school children, aged 11 to 16, in Oxfordshire County, England, supports the findings of Jones (1957) regarding the incidence of smoking in school.

10051129785

Source: https://www.industrydocuments.ucsf.edu/docs/mnd0020

Brill, A. Tobacco and the individual. Int. J. Psychoanal., 1922, 3, 430-444.

FINDINGS

The author discusses the process of acquiring tastes for specific foods and points out that it is much the same with tobacco. Three clinical cases are described showing various meanings smoking might have in the psycho-neurotic context: smoking as a compulsion, smoking as an emotional equivalent of masturbation, and smoking as a regression analagous to thumb-sucking. Brill is convinced that tobacco, whether indulged in a normal or abnormal way, is either a continuation of infantile auto-erotic gratification or a regression to it.

The taste buds are habituated to a certain brand of tobacco (whether of good or bad quality). Consumption of tobacco and candy has increased during prohibition and in cases where there was lack of food, or inadequate sexual outlet. Masculine aggression is evidenced in smoking. The mouth zone seems to require almost constant stimulation especially when one is laboring under difficulties.

COMMENTS

The hypothesis relating taste preference to brand loyalty is partially tested in studies of brand discrimination (see pp.).

1005129786

Source: https://www.industrydocuments.ucsf.edu/docs/pbnk0000

Brooks, J. E.
The Mighty Leaf: Smoking through the Centuries
Boston: Little, Brown, 1952 (x & 361 pp.)

PURPOSE

To write a general work on tobacco for lay readership.

METHOD

Analysis of historical documents.

FINDINGS

The author discusses the history of smoking in Europe prior to the time of Columbus and concludes that tobacco was unknown in Europe before the discovery of America. Changes in fashion over the centuries and the impact of the cigarette are discussed. There are some brief comments on reasons for smoking-- for the most part, in regard to physiological effects and the chemical properties of smoke.

COMMENTS

This is among the better recent works on the history of smoking. Aside from a treatment of more recent trends, however, it does not extend much beyond the scope of the standard historical works of Apperson and Corti. It includes a good bibliography.

1005129787

Source: https://www.industrydocuments.ucsf.edu/docs/znmk0000

Brooks, J. E. (Ed.)
Tobacco: Its History, illustrated by the books, manuscripts, and engravings in the library of George Arents, Jr., together with an introductory essay, glossary, and bibliographic notes by Jerome E. Brooks.
New York: Rosenbach, 1937-1952
5 volumes

PURPOSE

To provide a general history and bibliography of smoking.

METHOD

The Arents' collection of works on tobacco was catalogued in a chronological sequence with bibliographical material and excerpts of historical interest. A historical introduction 170 pages long is provided in the first volume. There are 3956 catalogued entries examining and describing 4235 works on tobacco. Volume 5 indexes the catalogue by name and subject.

FINDINGS

The history of tobacco is traced to about 1942. The work begins with the first literary reference made to tobacco in 1507, and emphasizes the ensuing two centuries.

COMMENTS

This is a prime bibliographical source in the history of tobacco. Anyone who undertakes an extensive historical study of tobacco should examine this work at the beginning of his labors.

1005129788

Source: https://www.industrydocuments.ucsf.edu/docs/mrtkebod

Brooks, J. E.
The Universal Remedy
New York: no publisher, c. 1932 (4 pp.)

PURPOSE

To provide a partial list of diseases and illnesses for which the use of tobacco has been recommended as a preventative, treatment, or cure.

METHOD

Listing of the maladies mentioned in 16 works of historical record regarding the medicinal properties of tobacco.

FINDINGS

More than 100 diseases and illnesses are listed.

COMMENTS

Only 200 copies of this pamphlet were printed.

1005129789

Source: https://www.industrydocuments.ucsf.edu/docs/rfrk0000

Brown, F. D. Effect of tobacco smoke on the growth and learning behavior of the albino rat and its progeny. In C. V. Good & G. Henderson (Eds.) Abstracts of graduate theses in education. Vol. II. Cincinnati: University of Cincinnati, 1936, pp. 1931-36.

ADAPTED FROM SECONDARY SOURCE
Psychol. Abstr.

1005129790

Source: https://www.industrydocuments.ucsf.edu/docs/mrmv0000

Carlson, A.J. & Lewis, J.H. The influence of smoking and of pressure on the abdomen (constriction of the belt) on the gastric hunger contractions. Amer. J. Physiol., 1914, 34, 149-154.

PURPOSE

To investigate the effects of smoking on hunger contractions.

SUBJECTS

An unspecified number of habitual smokers.

METHOD

An instrument was used to record stomach contractions in connection with the smoking of cigarettes, cigars, and pipes.

FINDINGS

Smoking tends to cause an inhibition of gastric hunger contractions. This inhibition appears to depend on the intensity of stimulation of the nerve endings in the mouth, a cigarette or "mild" cigar causing only slight inhibition, while a "strong" cigar or pipe causes complete and prolonged inhibition even when the gastric hunger contractions are at their maximum.

2005129791

Source: https://www.industrydocuments.ucsf.edu/tobacco/docs

Carlson, A. & Lewis, J. The influence of smoking and of pressure on the abdomen (constriction of the belt) on the gastric hunger contractions. Amer. J. Physiol., 1949, 34, 149.

FINDINGS

The irritation of nerve endings in the mouth by smoke was enough to slowstomach contractions. The nerve endings in the stomach were stimulated directly by nicotine and other irritating substances in swallowing saliva. A strong cigar or pipe was enough to supress an entire hunger period; a mild cigarette had a somewhat lesser effect.

ADAPTED FROM SECONDARY SOURCE
Steinhaus & Grunderman (1948)

1005129792

Source: https://www.industrydocuments.ucsf.edu/docs/rrmh0000

Coleman, J. S. The adolescent society: the social life of the teenager and its impact on education. Glencoe (Ill.): Free Press, 1961.

PURPOSE

To study the influences of adolescent culture on the success of high school education.

SUBJECTS

The high school populations of ten high schools in ten communities of varying size in Northern Illinois. The populations ranged from 150 to 1,950, and the total number of students was approximately 8,900.

METHOD

Two questionnaires were administered to the school populations, the records of every student were examined, informal interviews were held with a number of students, and questionnaires were sent to teachers and parents.

FINDINGS

Asked "Do you smoke?", the responses for students in nine public high schools were:

	Boys	Girls
Yes, regularly	15.2%	7.6%
Yes, occasionally	17.0%	15.5%
No	67.7%	76.9%
(number of cases)	(3,497)	(3,825)

There was a rather large number of "no answers" due to positioning of the question near the end of the questionnaire. Moreover, there was no control for age.

Descriptions of several cliques (pp. 188, 189, 198, 202, 205) mention a high proportion of smokers among them. Exact data are not given. The cliques said to have a relatively high proportion of smokers are not the highest status groups. They conform to the current adolescent culture (i.e., levis, duck-tail haircuts, rock and roll) and are characterized by an "away-from-school orientation."

10051292&3

Source: https://www.industrydocuments.ucsf.edu/docs/mhk0000

Corti, E. C.
A History of Smoking
(Transalated from the German by Paul England)
New York: Harcourt, Brace, 1932 (296 pp.)

PURPOSE

To present a general history of smoking.

METHOD

Analysis of historical documents.

FINDINGS

The book presents a history of smoking from its origins among the Indians of the Americas to the emergence of the cigarette into popularity. The book does not limit itself to any part of the world, and gives more attention to smoking in Central Europe than most other books on the subject.

COMMENTS

This is one of the best histories of tobacco.

It includes an extensive bibliography, particularly of works in foreign languages.

1005129794

Source: https://www.industrydocuments.ucsf.edu/docs/hdlp0000

Dam, C.H. Tobacco among the Indians. Amer. Mercury, 1929, 16, 74-76. (Soc. Sci. Abstr. I : 5108)

10051297S5

Source: https://www.industrydocuments.ucsf.edu/tobacco/docs/

Davies, W.E. Adolescents. Lancet, 1957, 1, 988-989.

In a report of a talk before the Royal Society of Health, passing mention is made that, among an unspecified number of 14 to 15 year old students at an English school, half of the boys and a fifth of the girls "had acquired a taste for smoking, and indeed that taste might already have developed into a habit."

1005129796

Source: https://www.industrydocuments.ucsf.edu/docs/tnkv0000

Davis, J.M. Idleness at the root of the tobacco evil in children. Wisconsin J. Education, 1914, 48, 70-73.

PURPOSE

To report his impression of the association between smoking and scholarship.

SUBJECTS

Approximately 600 male students of schools in Michigan.

METHOD

"Close observation" by the superintendent of schools.

FINDINGS

The author estimates that nonsmokers averaged two to ten percent higher in scholarship.

1005129797

Source: https://www.industrydocuments.ucsf.edu/docs/mmkd0000

Decaisne, G. Les enfants qui fument. Revue d'hygiène et de police sanitaire, 1883, 5, 422-433.

PURPOSE

To investigate the effects of smoking on the health of working children.

SUBJECTS

Twenty-seven children, aged nine to fifteen years.

METHOD

Tabulation of the effects of tobacco on the blood, circulation, heart, digestion and respiration, and presentation of four case histories. Clinical method.

FINDINGS

"Les enfants qui fument accusent une certaine paresse de l'intelligence" ("Children who smoke show a definite sluggishness of intellect").

"Chez les enfants qui cessent de fumer et qui ne sont atteints d'aucune lésion organique, les désordres de l'economie que nous venons d'enumérer disparaissent souvent très promptement et sans laisser aucune trace." ("Among the children who stopped smoking and had no organic problems, the disorders of health we have described disappeared, often very quickly and without leaving any trace.").

COMMENTS

The observations are clinical and uncontrolled. It is not clear whether cessation of smoking was the only change in behavior that preceded the disappearance of the health problems. It is likely that the physician himself was prescribing other remedial measures.

1005129798

Source: https://www.industrydocuments.ucsf.edu/docs/jfnnk0000

Diehl, H.S. Health and scholastic attainment. Public Health Reports, 1929, 44, 3041-3049.

PURPOSE

". . . to investigate the effect of physique, physical handicaps, and habits of living upon the scholastic attainment of college students."

SUBJECTS

A group of 141 students, mostly freshmen, who had been put on probation for poor scholarship at the University of Minnesota, and a control group of 496 students, mostly seniors, who had satisfactory college records. The ratio of males to females in each group was approximately 7:3.

METHOD

A college regulation required all students on probation to have a health examination. Other students could voluntarily undergo the same examinations. The records of these examinations provided the source of data.

FINDINGS

"After reviewing the history and talking with the student the examiner indicated whether or not the student used tobacco, and if he did use it, whether in his opinion it was used to excess. In both the excessive use of tobacco and the total abstinence from tobacco the control group showed a slightly higher percentage than the probationers, although here again the difference is hardly great enough to be statistically significant."

COMMENTS

The investigator acknowledges the possibility of bias in the data due to (a) the required vs. voluntarily basis of examinations, and (b) the predominance of freshmen in the experimental group and seniors in the control group. The age factor might have influenced the variable of smoking habits, accounting for the larger proportion of excessive smokers among the good students.

1005129799

Source: https://www.industrydocuments.ucsf.edu/docs/...

Dill, D.B., Edwards, H.T. & Forbes, W.H. Tobacco smoking in relation to blood sugar, blood lactic acid, and metabolism. Amer. J. Physiol., 1934, 109, 118-122.

PURPOSE

To determine the effect of cigarette smoking on several physiological processes.

SUBJECTS

Eight smokers and two nonsmokers.

METHOD

Subjects rested for ninety minutes, smoked one cigarette (inhaling) during a period of five to ten minutes, then rested again for forty-five minutes.

FINDINGS

There were no significant changes in the level of blood sugar, or of blood lactic acid.

Eight smokers showed no change in rate of respiration. Two non-smokers showed a decrease.

Metabolic rate increased from five to fifteen percant in some subjects.

COMMENTS

Other research (Haggard and Greenberg, 1934) has suggested that an increase in blood sugar and respiration rate occurs after smoking.

1005129800

Source: https://www.industrydocuments.ucsf.edu/docs/jmnk0000

Dunhill, A. H.
The Gentle Art of Smoking
London: Max Reinhardt, 1954 (xiii & 146 pp.)

A brief history of tobacco, with a description of the cultivation of tobacco, the manufacture of tobacco products, and proper methods of cigarette, cigar, and pipe smoking. Poor bibliography. Of limited use to the social scientist.

100512801

Source: http://www.industrydocuments.ucsf.edu/tobacco

Earp, J. R. The student who smokes: an original statistical investigation. Yellow Springs (Ohio): Antioch Press, 1926 (2nd ed., 1931).

PURPOSE

To study the association of smoking to physical efficiency, intelligence, and scholarship.

SUBJECTS

A group of 353 students at Antioch College.

METHOD

Analysis of college records and a questionnaire on smoking habits.

FINDINGS

A significant difference in intelligence in favor of smokers appeared in one of the measures. Earp interpreted this as a consequence of the process of admission to the college. "If the high school boys who smoke get lower grades than the nonsmokers, then a smaller proportion of the former will secure admission, and being selected from the upper end of the scale their native intelligence will be on the average higher than that of the nonsmokers."

There was "an indisputable association between the smoking habit and inferior scholarship." This appeared in the difference between the mean grades for smokers and nonsmokers in the entire population ($p < .0001$) and in the subgroup of freshmen ($p < .0001$). The latter sample was regarded as a more homogeneous group than the entire student body, since they tended to take the same courses and to have the same instructors.

Rate of smoking was also observed to be related to scholarship. The mean grade fell as the amount of smoking increased. "The fact that the heavy smokers fail more often than those who smoke less supports the theory that tobacco is the cause of low scholarship. But it is not final proof of this theory. If sociability rather than tobacco causes low scholarship it may still be true that the more sociable a student is the more he smokes.

No significant relation was found between the duration of the smoking habit and the level of scholarship. There was some evidence for a three-year period that the mean grade for smokers fell while that for nonsmokers remained constant.

The mean grade of smokers who inhaled was significantly lower than that for smokers who did not inhale ($p < .01$).

COMMENTS

This is the most extensive study available of the association between smoking and scholarship.

1005129802

Source: https://www.industrydocuments.ucsf.edu/docs/mhpg0000

Earp, J.R. The smoking habit and mental efficiency. Lancet, 1927, 2, 527.

PURPOSE

To replicate an earlier study of smoking and scholarship (Earp, 1926).

SUBJECTS

A group of 446 students at Antioch College.

METHOD

Analysis of college records and responses to a questionnaire on smoking habits.

FINDINGS

The results of this study confirmed those of the earlier study in all respects but one: there was no decline in scholarship for a group of heavy smokers over a period of three years.

1005129803

Source: https://www.industrydocuments.ucsf.edu/docs/mnk0000

Earp, J.R. Tobacco, health, and efficiency. Lancet, 1925, 1, 213.

PURPOSE

To study the effects of smoking on the functioning of the cardiac and respiratory organs.

SUBJECT

A group of 304 male students at Antioch College.

METHOD

Analysis of medical and athletic records.

FINDINGS

Smoking did not "materially affect the efficiency of the cardiovascular system."

A greater proportion of athletic events were won by nonsmokers than would be expected by chance.

The difference in average cumulative scholarship between smokers and nonsmokers was in favor of the nonsmokers ($p < .0001$).

COMMENTS

This is a preliminary study to that reported in The Student Who Smokes (1926, 1931).

100512980

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Earp, J.R. The smoking habit and mental efficiency: an inquiry into the association between smoking and scholarship. Lancet, 1926, 1, 1018-1020.

This is a brief presentation of the study reported by Earp in The Student Who Smokes. (1926, 1931).

1005129805

Source: https://www.industrydocuments.ucsf.edu/docs/hamk0008

Edwards, A. S. The effect of smoking on tremor. J. appl. Psychol. 1948, 32, 150-158.

1005129806

Source: https://www.industrydocuments.ucsf.edu/tobacco/docs/

Essenberg, J.M. The effect of nicotine on maze behavior of albino rats. J. Psychol., 1954, 37, 291-295.

PURPOSE

To investigate experimentally the effect of nicotine injections on the behavior of albino rats.

SUBJECTS

Forty albino rats, matched for sex and litter.

METHOD

A training criterion of ten errorless runs on two successive days in a Lashley 8-cul-de-sac maze was set. These performances were taken as initial time and error scores. When the criterion had been reached, the experimental rats were given daily injections of nicotine. The experiment continued for two years, with rest periods ranging from three days to three months.

FINDINGS

". . . the performances of the experimental group became significantly poorer during the first half of the experiment than either their own initial performances or those of the control group and . . . this trend became more pronounced during the second year when all differences between initial and final scores and between experimental and control animals became significant at the 0.1 percent level of confidence."

During the final year, experimental rats became shy and hesitant, sometimes refusing to run.

Control rats that received injections of saline solution showed no differences from other control rats that received no injections.

". . . the extent to which these findings can be extrapolated to other species is problematical. It is possible that a similar deterioration in performance might be a regular feature of any type of chronic poisoning but this remains to be determined. . . . The dosage was calculated to be the equivalent of that achieved by a human being of average weight smoking a package of cigarettes each day. The possibility that this would be sufficient to produce some deterioration in performance should at least be considered."

100512807

Source: https://www.industrydocuments.ucsf.edu/docs/pmk0000

Essenberg, J.M. The deterioration of intelligence of albino rats chronically poisoned by nicotine. J. Psychol., 1955, 40, 299-313.

PURPOSE

To study the effect of nicotine on the intelligence of white rats.

SUBJECTS

Twenty-eight female rats.

METHOD

The Hebb-Williams closed field maze as modified by Rabinovitch and Rosvold was used as an index of intelligence. Initial time and error score of both groups were taken prior to treatment. This was followed by the injection of a weak solution of nicotine in normal saline intraperitoneally in the experimental rats, and normal saline alone in the control animals for a six-month period. During this time both groups received maze experience once a week.

FINDINGS

At the end of six months, experimental groups were higher in time ($p < .10$) and error ($p < .01$) scores than previously. The experimental group was higher than the control group on time ($p < .02$) and error ($p < .001$) scores. The author interprets these results to indicate that marked mental deterioration had taken place among the experimental rats.

COMMENTS

This experiment examines the effect of nicotine on some combination of physical and mental efficiency, rather than on 'intelligence', in the sense the term is used with human beings.

100512980B

Source: http://www.industrydocuments.ucsf.edu/docs/[illegible]

Essenberg, J. M. The effect of nicotine or maze learning ability of albino rats. Federation Proceedings, 1948, 7, 31-32. (Abstract of paper read before the Amer. Phys. Soc. meetings, 1948.)

PURPOSE

To study the effect of nicotine on the maze learning ability of albino rats.

SUBJECTS

Eighteen young, sexually mature albino rats.

METHOD

Subjects were observed in a Lashley maze. Injections of nicotine began after 10 consecutive errorless runs. Observation continued from 18 to 24 months.

FINDINGS

For all animals treated with nicotine, there was a gradual increase in the number of errors.

2005129809

Source: https://www.industrydocuments.ucsf.edu/docs/jmnk0000

Estes, E., Lieser, R. The smoking characteristic of a group of smokers. Unpublished paper presented before Ninth Annual Tobacco Chemist's Conference, Raleigh, N.C., 1955.

1005129810

Source: https://www.industrydocuments.ucsf.edu/docs/snnk0000

Eysenck, H.J., Tarrant, Mollie, Woolf, Myra, & England, L. Smoking and personality. British Med. J., 1960, 1, 1456-1460.

PURPOSE

To determine whether innate or genotypic personality factors are related to differences in smoking habits.

SUBJECTS

A quota sample of 2360 male subjects was drawn. The quota categories were type of smoking (light, medium, heavy, pipe, ex-, and non-), age (40-59 and 60-70), and social class (levels ABC pooled and DE pooled).

METHOD

Interviews and questionnaires. The questions were designed to assess the traits "extraversion," "rigidity," and "neuroticism." Factor analysis of the data produced three orthogonal factors conforming to these traits.

FINDINGS

The heavier the rate of cigarette smoking, the greater was the level of extraversion ($p < .01$). This supported the hypothesis based on "the well-known characteristic of the extraverted personality to concentrate on objects in the outer world, in contrast to the introvert, who tends to be preoccupied with his own thought processes and other internal states."

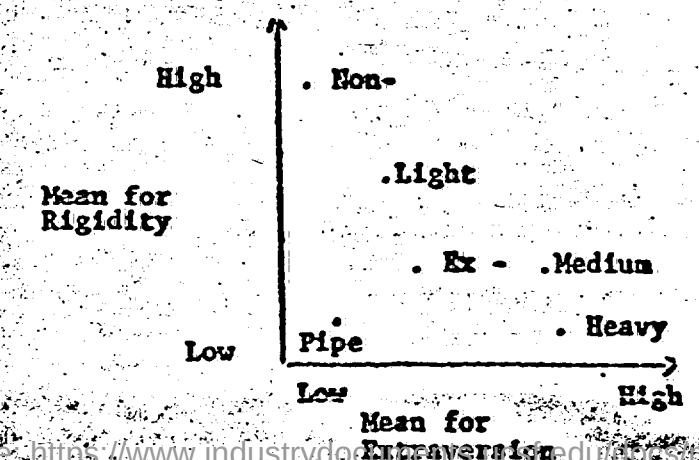
The heavier the rate of cigarette smoking, the lower the level of rigidity ($p < .05$). It had been hypothesized that the rigid person would be less likely to smoke because "smoking, as indeed all pleasurable activities, tends to be regarded as slightly sinful, and would therefore tend to be shunned by the rigid, puritanically minded type of person."

No significant difference was observed in the level of neuroticism with different rates of smoking, although there was a tendency for neuroticism to be higher among heavy and medium smokers. It had been expected that heavy smokers would show a high level of neuroticism due to the tension-reducing and emotion-stabilizing properties of smoking.

Nonsmokers and ex-smokers were more likely to have habits like pencil-chewing and nail-biting. In the lower social classes, nonsmokers were more likely to report using their hands while talking.

Pipe smokers were the most introverted group studied.

The means for extraversion and rigidity in the six groups of smokers take this distribution when plotted on a graph:



1005129811

Source: https://www.industrydocuments.ucsf.edu/docs/shnk0000

Eysenck et al., 1960 (cont'd.)

COMMENTS

The investigators conclude: "On the whole the data confirm the view that genotypic differences exist between smokers and non-smokers, and between cigarette smokers and pipe smokers." It is not incompatible with the data, however, to suggest that these traits might be acquired rather than innate.

1005129812

Source: https://www.industrydocuments.ucsf.edu/docs/nnk0000

Fairholt, F.W. History of tobacco. 1859.

1005129813

Source: https://www.industrydocuments.ucsf.edu/docs/hmk0069

Field, H.S. The immediate effects of tobacco smoke on the activity of rats. Univer. Calif. Publ. Physiol., 1926, 5, 169-194.

SUBJECTS: Rats

FINDINGS

The rats were quiet during a seven minute 'smoking period', but were more active when placed in activity cages afterwards. The results were obtained regularly.

ADAPTED FROM SECONDARY SOURCE: Psychol. Abstr.

1005129814

https://www.industrydocuments.ucsf.edu/docs/hank0000

Fink, B. Smoking and scholarship again. School & Society, 1921, 14, 87-89.

In a letter to the editor, Fink replies to a statement in which Andrews (1921) asserts that smoking quiets the nerves and aids in mental attainment. He cites several studies that reputedly show that "tobacco is a factor in the lowar scholarship and other deficiencies of the smoking boys and young men."

2005129815

Source: https://www.industrydocuments.ucsf.edu/docs/nnnk0000

Finnegan, J.K. Larson, P.S., and Haag, H.B. The role of nicotine in the cigarette habit. Science, 1945, 102, 94-96.

PURPOSE

To investigate the role of nicotine in the tobacco habit.

SUBJECTS

Twenty-four male habitual cigarette smokers, (18-34 cigarettes per day,) all inhalers, 22-30 years of age, each of whom felt that he could not easily forego the habit.

METHOD

Cigarettes were made from tobacco naturally low in nicotine and from the same tobacco with nicotine added. After subjects recorded their usual cigarette consumption for a period of one month each subject was given two cartons of cigarettes to which nicotine had been added, in order to accustom them to the taste and quality of the new cigarette. These were followed by four cartons of low nicotine cigarettes, followed again by two cartons of cigarettes to which nicotine had been added. Subjects kept a personal account of their cigarette consumption, and were questioned as to their reactions to each carton.

FINDINGS

"With many individuals nicotine becomes a major factor in their cigarette habit. Equally certain, with many individuals nicotine does not play a role in the cigarette habit."

COMMENTS

The report does not specify what the subjects were asked about their reactions to each carton of cigarettes, nor what answers were taken into account in the authors' conclusions. We are not told, for example, if it was possible to prefer the low nicotine cigarette to the high nicotine cigarette. If so, the results obtained are striking, for no smoker preferred the low nicotine cigarette. If not, the results are difficult to interpret. It might be of value to write to the authors in order to find out in greater detail just what they did.

The records kept by the subjects may not have been accurate. The authors did not report the level of significance of the results.

Future studies could be improved if it is possible to develop a technique that denicotinizes the smoker's regular brand of cigarettes, without otherwise altering it.

If further studies confirm the result that nicotine plays a major role in the cigarette habit of some individuals, while it does not in the cigarette habit of others, research could and should be focused on the possible personality and constitutional correlates of this difference.

1005129816

Source: https://www.industrydocuments.ucsf.edu/docs/mark0000

Froeberg, Sven, Effects of smoking on mental and motor efficiency. Journal of Experimental Psychology, 1920, 3, 334-346.

PURPOSE

To determine the effects of tobacco on the mental and motor efficiency of humans.

SUBJECTS

An unspecified number of students, aged 19 to 24 years, in an elementary psychology course at the University of Michigan. Results are reported for five subjects in each of the two phases of the study.

METHOD

In the first phase, students performed 3 motor and 5 mental tests following thirty minutes of smoking or of reading and conversation. Comparisons were made between performances on smoking and nonsmoking days.

In the second phase, students performed on 5 mental tests both before and after thirty minutes of smoking or of reading and conversation. Comparisons were again made between performances on smoking and nonsmoking days, with differences between the "before" and "after" conditions controlled.

FINDINGS

Differences in performance are not consistent from subject to subject. Moreover, differences of mental ability exceed the computed probable error only 4 times out of 50 cases (10 subjects on 5 tests).

"As far as the results of these experiments go, and as far as the immediate effect of smoking is concerned. . . . except when used in excess, by adolescents, by persons having an individual idiosyncrasy against tobacco, or by persons suffering from certain nervous affections, there is no scientific evidence that the moderate use of tobacco, in smoking produces any either beneficial or injurious mental effect sufficiently great to be measured." (p. 346).

1005129817

Source: https://www.industrydocuments.ucsf.edu/docs/hmk0030

Gies, W.J., Kahn, M., & Limerick, O.V. The effect of tobacco on man. New York Med. J., 1921, 113, 809-811.

PURPOSE

To compare the prevailing "scientific," as distinguished from "emotionalist," opinion regarding the effects of tobacco.

SUBJECTS

Not reported.

METHOD

Not reported. The article is for the most part speculative.

FINDINGS

Following the acute intoxication of first use, the body sets in operation a specific antidotal mechanism so that there is decreased sensitivity to tobacco.

"As used by those habituated to the plant, the effect of tobacco is chiefly confined to the vascular and psychic mechanisms. The immediate effect is a moderate but temporary rise in blood pressure and an increase in the power of concentration, in consequence of a better adjustment of the ego to its environment."

"Man learned by chance that tobacco (after having once set in operation the specific antidotal mechanism of the body) gives rise to certain pleasurable sensations; that it allays restlessness, tranquilizes emotional inquietude and fosters repose. Profiting by experience, he in time came to resort to tobacco whenever he felt the need of relief from physical or emotional strain. The smoking impulse, or craving for tobacco, is merely the expression of the need of the organism, artificially environed, for something that does not increase the store of energy -- something that is not food. It is an impulse acquired under the influence of selective palliation."

The observation that men cannot find satisfaction from smoking in the dark "lends emphasis to the validity of the psychic factor in the tobacco habit, and tends to show that the craving is chiefly a demand for the satisfaction of a psychic impulse, not for the specific effect of nicotine or of anything in tobacco smoke."

The drift of tobacco users toward mild forms of tobacco consumption (e.g., from cigars to cigarettes) is the opposite of what one finds with drug addicts and lends further support to the hypothesis that the craving for tobacco is a psychic impulse.

COMMENT

Despite some outdated or ill-conceived notions, this article has some ideas that might contribute to research.

The authors point to the dissatisfaction with tobaccoless cigarettes during the First World War as indicative of the importance of tobacco to the act of smoking. An alternative explanation would be that smokers were dissatisfied with the perception of tobaccoless cigarettes. Hull (1924) was able to induce satisfaction in his subjects with a tobaccoless pipe that gave blindfolded subjects warm air and aroma.

100512818

Source: https://www.industrydocuments.ucsf.edu/docs/xlrk0000

Gosling, T.W. Tobacco and scholarship. School Review, 1913, 21, 690-693.

PURPOSE

To study the association between smoking and scholarship.

SUBJECTS

A group of 103 boys in the senior class at Hughes High School in Cincinnati, Ohio.

METHOD

Subjects were interviewed briefly about their smoking habits under conditions alleged to have elicited truthful answers. The general average in school for the first term of the senior year provided the measure of scholarship.

FINDINGS

". . . in every one of the comparisons between the class of smokers and the class of non-smokers, the advantage in scholarship lies with the non-smokers." The average grade of those who never smoked was higher than that of those who discontinued smoking or were currently smoking. The first three in the rank list had never smoked, and the lowest six were all smokers.

The average grade of those who began to smoke after the age of fourteen was higher than that of those who had begun at an earlier age.

COMMENTS

No test of significance of the observed difference between mean grades is reported.

100512981

Source: https://www.industrydocuments.ucsf.edu/docs/nnnk0000

Gottsegen, J. J.
Tobacco: A Study of Its Consumption in the United States
New York: Pitman, 1940 (xxix & 279 pp.)

PURPOSE

To examine the general economics of tobacco expenditure and the effects on consumption of (a) physiological and psychological factors, (b) harmful effects, (c) social factors (fashion), (d) price changes, (e) income changes, and (f) advertising.

METHOD

Analysis of data reported in studies by other investigators.

FINDINGS

The study reports patterns of tobacco expenditure in terms of income, residence, and region, lists physiological and psychological reasons that have been offered to explain smoking habits, and summarizes the fashion changes that have occurred since the discovery of tobacco by Europeans.

The author devotes a good deal of attention to the theories that may be proposed to explain fashion changes in the manner in which tobacco is consumed.

COMMENTS

The book is valuable for its summarization of previous studies, its bibliography, and its discussion of fashions in tobacco consumption.

1005129820

Source: https://www.industrydocuments.ucsf.edu/docs/jnyk0000

Haenszel, W., Shimkin, M. B., & Miller, H. P.
Tobacco Smoking Patterns in the United States, including an addendum, "Tobacco Consumption in the United States, 1880 to 1955," by Benno K. Milmore & Arthur G. Conover
(U. S. Dept. of Health, Education, & Welfare; Public Health Service; National Cancer Institute; P.H.S. Publication 463; P.H. Monograph 45) Washington: U. S. Govt. Printing Office, 1956.

PURPOSE

To report the findings of a survey of tobacco smoking patterns in the United States.

SUBJECTS

Approximately 45,000 persons in 21,000 households, drawn from the population of civilian, noninstitutionalized individuals over the age of 18.

METHOD

Data on all persons over the age of 18 within a household were obtained through interviews by the staff of the Bureau of the Census in February 1955.

Smoking habits are analyzed in terms of: (a) cigarette, cigar, pipe; (b) regular (at least once a day), occasional; (c) current, discontinued, never-smoked; (d) exclusive (cigarettes, cigars, or pipes only), mixed (any combination of cigarettes, cigars, and/or pipes); (e) rate of smoking (units per day).

FINDINGS

The survey finds the variables of sex and age of greatest importance in accounting for individual differences in smoking. There are distinct trends in regard to residence and previous military experience, and some patterning in region, occupation, industry, and marital status. Differences in terms of race are trivial except in regard to the percentage of heavy smokers.

There are more male than female smokers, and males smoke more heavily than females.

A larger proportion of younger persons than older persons are smokers. Individuals tend to begin smoking at an earlier age than previously, and males begin earlier than females.

Smoking is more common in urban than in rural areas. Residential patterning seems to indicate that smoking by females began to become acceptable in cities in the 1890's, but not until after 1920 in farm localities.

There is a higher proportion of smokers among veterans than among non-veterans.

The percentage of white males smoking more than 21 cigarettes a day is almost double that of the nonwhites (13.3% in comparison to 6.9%).

The addendum reports that cigarettes did not displace chewing tobacco as the most common form of tobacco consumption until 1922 (indexed by consumption per person over 14 years in unstemmed processing weight).

2051129821

Source: http://www.industrydocuments.ucsf.edu/docs/hmrk0000

Haenszel et al., Tobacco Smoking Patterns, 1956 (continued)

COMMENTS

The interviewing method depended on self-report, and, in some instances, report by another member of the household. This circumstance increases the likelihood of inaccuracy in the data regarding the age at which one began to smoke and in regard to past and present smoking rates.

Considering the fact that chewing was the primary mode of tobacco consumption until the 1920's, the limiting of the survey to smoking does not permit the study of the shift from chewing to smoking in the older age group. This is a pity, since the substitutibility of one form of tobacco consumption for another might throw some light on the smoking process as a whole.

This report and its companion report by Sackrin & Conover (1957) constitute the best demographic data available on the patterns of tobacco smoking in the United States.

100512822

https://www.industrydocuments.ucsf.edu/docs/phnk0000

Haggard, H. and Greenberge, L. The effects of cigarette smoke upon the blood sugar, Science, 1934, 79, 165-166.

PURPOSE

To study optimum meal spacing in children and adults.

SUBJECTS

Relevant number not stated; the authors report that the original number was large, that it contained both children and adults, and that some of the adults smoked.

METHOD

Various spacings of meals were used, and a number of physiological measurements, including blood sugar level, were taken and recorded from time to time. Some of the adults showed 'mysterious' rises in blood sugar at unexpected times. This was investigated.

FINDINGS

It was found that the rises in blood sugar occurred after subjects smoked. The hyperglycemic effect (increase in blood sugar) is temporary, and does not occur when the concentration is above .13%, as it tends to be for two to three hours after a meal.

The authors quote studies on animals in which it was found that the action of nicotine upon the adrenal glands leads to hyperglycemia. Their observations indicate that hyperglycemia following a meal relieves the fatigue and irritability that generally develops after the fasting level (.13%) of blood sugar is reached. The other effects of smoking, such as the acceleration of the pulse, and temporary rise in arterial blood pressure, were thought by the authors to depend on the discharge of adrenalin.

"Among many possibilities, tobacco alone maintains popularity as a product to be smoked." The authors believe that the popularity of tobacco is explained by nicotine, which tobacco alone contains.

COMMENTS

This article should be of particular relevance to the study of smoking and stress. In particular the effects of nicotine and other products of tobacco on autonomic and endocrine processes related to stress could be studied further.

The authors' discussion suggests the role of physiochemical factors in the possible substitution of smoking for eating.

This study should be read in conjunction with studies by Boldyreff (1935) and by Dill, Edwards, and Forbes (1934).

100129823

Source: https://www.industrydocuments.ucsf.edu/docs/mnk0000

Hall, Ada R., & Blakeslee, A.F. Effect of smoking on taste thresholds for phenyl-thiocarbamide (PTC). Proceedings of the National Academy of Science. (Washington), 1945, 31, 390-396.

PURPOSE

To determine the effects of cigarette smoking on taste thresholds for phenyl-thiocarbamide.

SUBJECTS

A group of 32 habitual smokers and 28 nonsmokers.

METHOD

Concentrations of PTC were used such that each dose was twice as concentrated as that previously administered. Approximately 0.6 cc. of solution was given by means of the straw method.

There were two phases in the experiment. In the first, the threshold for PTC was determined, the subject smoked two cigarettes for ten to fifteen minutes, and then the threshold for PTC was determined again during fifteen minute periods. In the second phase, ten subjects were tested as before, except that a special apparatus was used to cool the smoke and to avoid contact with the taste buds.

FINDINGS

In the first phase, 73.3 percent of the subjects showed an initial decrease in tasting ability with restoration of the original threshold within thirty to forty-five minutes. About 20 percent of the subjects showed an initial increase.

In the second phase, seven subjects showed an initial increase in tasting ability with six of them experiencing a decrease from thirty to forty-five minutes afterward. Three subjects showed no initial change, but had a decrease in taste sensitivity from thirty to sixty minutes after smoking.

1005129824

Source: https://www.industrydocuments.ucsf.edu/docs/jhnk0000

Hammond, E. C. Inhalation in relation to type and amount of smoking. J. Amer. Statist. Ass., 1939, 54, 35-51.

1005129825

Source: https://www.industrydocuments.ucsf.edu/docs/nmnk0000

Hammond, C., Rachel, L., & Marks, M. "Brand Discrimination among Cigarette Smokers". J. Appl. Psychol., 1950, 34, 282-284.

PURPOSE

To determine whether smokers can make correct identifications of cigarette brands using taste as a criterion.

SUBJECTS

Two hundred male students at Tulane University, all of whom usually smoked at least five cigarettes a day.

METHOD

Subjects in one group were permitted to smoke three cigarettes of different brands at the same time, interchanging them as they pleased, until each one felt he could make a correct identification. Subjects in another group smoked three cigarettes in succession, smoking only one cigarette at a time, and then were asked to make an identification. There were preliminary practice trials before the actual testing sessions. Brand names were obscured by labels.

FINDINGS

Brands were correctly identified in 44 per cent of the trials ($p < .001$). There was no significant difference in accuracy between the two test groups. Smokers identified their own brands more than 70 per cent of the time.

COMMENTS

The results of this study make it possible to entertain the hypothesis that brand loyalty is mediated by taste preference (see Brill, 1922).

1005129826

Source: https://www.industrydocuments.ucsf.edu/docs/fbnk0026

Harrington, J. P.
Tobacco Among the Karuk Indians of California
(Smithsonian Institution Bureau of American Ethnology, Bulletin 94)
Washington: U. S. Govt. Printing Office, 1932. (xxxvi & 284 pp.)

PURPOSE

To present an exhaustive analysis of the use of tobacco by a North American Indian tribe. Heavy emphasis is placed on tracing "every act and status" through the native language to the psychology and mythology behind it.

SUBJECTS

The Karuk Indian tribe on the Klamath River in California.

METHOD

Largely based on information obtained through interviews with members of the tribe.

FINDINGS

The part of greatest interest to the social scientist is chapter 10, and more particularly pages 183-221 on smoking procedures. Chapters 11 through 21 are also relevant to the social scientist.

"In smoking, the Karuk sought the effect of acute tobacco poisoning. Effort was made to take the smoke into the lungs and to hold it there as long as possible."

Men meeting on a trail sat down and shared one another's pipe. Women would share lunch together, unless they were female doctors. Female doctors smoked, and would share a pipe when they met on the trail.

The Karuk neither ate nor smoked while standing. They also regarded it as bad luck to smoke while defecating.

The Karuk used tobacco to treat injuries, toothache, earache, and as a cure for insomnia. The doctors used tobacco themselves to enhance their therapeutic powers.

2005129827

Source: https://www.industrydocuments.ucsf.edu/docs/fmnk0000

Heath, C. W. Differences between smokers and nonsmokers. Amer. med. Ass. Archives of internal Medicine, 1958, 101, 377-388.

PURPOSE

To explore differences of physique, physiology and personality between smokers and nonsmokers.

SUBJECTS

A sample of 252 Harvard Alumni, in the age range of 33 to 37 years in 1958. The sample used in this study is the same as that used by McArthur (1958) and by Seltzer (1959). In the study of personality, the 5 heaviest smokers and 5 nonsmokers were compared.

METHOD

Subjects were given an initial medical examination in which smoking habits, among other habits, were recorded by the following classifications: (a) Tobacco--none, daily, varies; (b) cigarettes--zero, 1-5, 6-10, 11-19, 1 to 2 packs, more than 2 packs a day; (c) pipes--zero to one, 2, 3, 4, 5 plus per day; (d) cigars--0, 1, 2, 3, 4, 5 plus per day. In addition, psychiatrists and others recorded the subjects' comments about their smoking habits. Subjects were followed throughout the period from 1938 until 1953 by means of annual questionnaires.

FINDINGS

A comparison of the case records of the five heaviest smokers (more than 2 packages of cigarettes per day) with those of five nonsmokers showed marked contrasts in personalities. The smokers exhibited greater energy, restlessness, seeking for danger, and a kind of independence that kept them actively engaged in some enterprise of interest to them. They also had difficulty with marriage. They were searching for aims and purposes and perhaps, although less stable than nonsmokers, more interesting. The nonsmokers were steady, dependable, and hard workers. They had stable marriages and histories of specialized noncombat war duties. They led rather "quiet progressive lives" (p. 386). They possessed the more stable qualities, good direction of aims in life, although they were somewhat on the bland and colorless side.

While in college the nonsmokers tended to major in natural sciences, particularly in physics and chemistry; the smokers tended to choose majors in social studies and arts and letters. The nonsmokers tended to enter scientific careers; the smokers, careers in social relations, education and writing (p. 381). Moderate smokers were represented predominantly in business and medicine. In World War II, there was a significant tendency for nonsmokers to be in branches of the Navy, heavy smokers to be in the Army. Better adjustment to the Armed Forces was shown by nonsmokers and moderate smokers. More heavy smokers than

1005129828

Source: https://www.industrydocuments.ucsf.edu/docs/hnnk0000

1958

Heath, C. W. cont'd

nonsmokers had combat duty.

There was some evidence from the study of psychotypes that nonsmokers tended towards cerebrotonia, moderate smokers toward somatotonia and heavier smokers towards viscerotonia.

The comparison of smoking habits with a large variety of physiological and medical data, such as physical fitness, height, weight, number of colds, pulse, blood pressure and dymptoms accompanying stressful experiences, gave largely negative results. However certain findings are noteworthy. Nonsmokers tended to be slow breathers, the heavier smokers rapid breathers. The knee, ankle, biceps, and abdominal reflexes of smokers tended to be reduced.

The heavier smokers indulged more in alcohol and coffee than did the nonsmokers. The moderate smokers tended to gain more weight during the years, the heavier smokers to lose wiight.

Heath sees the results of this study as strongly suggesting that smoking is more than a superficial habit "overlayed indiscriminantly" upon a group of men but has some origins, at least, in personality and physiologic characteristics.

COMMENTS

The personality findings are particularly interesting when compared with those by McArthur (1958). Wheras Heath found the nonsmokers to possess the more stable qualities and to be somewhat on the bland and colorless side, using a contrasting the 5 heaviest smokers and 5 nonsmokers, McArthur found, using a modification of the Rorschach method that the heavier smokers tended to have more constated Rorschach records, the latter usually interpreted as indicative of a certain lack of emotional resources and indicative of blandness. As mentioned before, these two studies are based on a study of this same sample of individuals, though Heath refers mainly to the five heaviest smokers and five nonsmokers.

Whereas the McArthur study was revealing in terms of the socio-economic past of smokers, the present study is revealing to some extent of their socio-economic future ie.e eventual occupational choice. It may be that the findings of this study have more to do with the relation of socio-economic background and choice of careers that they have to do with smoking. Reexamination of the raw data collected by both McArthur and Heath could be made to determine what the role of smoking is in these correlations.

1005129829

Source: https://www.industrydocuments.ucsf.edu/docs/mnk0026

Heath, C. W. 1958 cont'd

The findings that moderate smokers tend to gain more weight and heavier smokers tended to lose weight over the years is consistent with the psychoanalytically derived hypothesis that smoking fulfills oral needs. Assuming that smokers all have a certain amount of oral needs, the heavier smokers would gratify these needs through smoking and therefore will not tend to use food for this purpose. It may, however, simply be related to the fact that smoking suppresses hunger, and the obvious fact that if one has a lit cigarette in one's mouth it is difficult for him to eat at the same time.

This study and the study by McArthur represent the most thorough studies in the area of smoking and personality to this date.

1005129830

Source: https://www.industrydocuments.ucsf.edu/docs/mnk0000

Hervey, H.D. The cigarette. Journal of Education (Boston), 1907, 65, 485-487.

PURPOSE

To determine the smoking habits of school children and the effects of smoking on health, scholarship, and morals.

SUBJECTS

Forty pairs of boys, aged seven to fifteen years, from the public schools of Malden, Massachusetts. Hervey, the superintendent of schools, asked every teacher to select two boys from their class, one a smoker and the other a nonsmoker.

METHOD

Teachers submitted to the investigator written reports on each of the boys selected by them for study. Hervey found forty sets of data complete enough for analysis.

FINDINGS

Smokers tended to be older in years, shorter in height, poorer in scholarship, more likely to fail in promotion, more likely to have poor vision, more likely to have poor hearing, and more likely to be judged by their teachers as poor physically, mentally, and morally. Smokers were most frequently described as "lazy," "incapable of sustained attention," "unable to think at times," and "weak of will."

COMMENTS

The method of selecting subjects was not random, and the opinions of the superintendent of schools about smoking may have biased the teachers in the selection and evaluation of students.

100512831

Source: https://www.industrydocuments.ucsf.edu/docs/jmnk0000

Hiller, E. Some remarks on tobacco. Int. J. Psychoanal., 1922, 3, 475-480.

PURPOSE

To discuss psychonalytic symbolism possibly related to smoking.

METHOD

Psychoanalytic discussion.

FINDINGS

Tobacco can symbolize feces, the penis, semen, while tobacco smoke can symbolize flatus or semen. Cigarettes and cigars can symbolize the penis, while pipes and cigarette holders can symbolize both the penis and the vagina. Other topics related to smoking are discussed: offering cigarettes, lighting cigarettes, the act of smoking, the boy smoking, masturbation, the man smoking, the woman smoking, exhibitionism and ambivalence. One of the reasons for starting to smoke is the phallic significance of the cigarette, cigar, or pipe.

COMMENTS

If the phallic symbolism of the cigarette, cigar, and pipe are important reasons for smoking, one might learn more about smoking by studying periods of history in which these forms of tobacco consumption were replaced by snuffing or chewing tobacco, neither of which have the obvious phallic significance of the cigarette, cigar, or pipe.

1005129832

Source: https://www.industrydocuments.ucsf.edu/docs/mkc000

Hobson, J.W., & Henry, H. (Eds.) Pattern of smoking habits. (Hulton research studies of the British social pattern) London; Hulton Press, 1948

1005129833

Source: https://www.industrydocuments.ucsf.edu/docs/snk0016

Holt, W.L. Apparent effects of smoking among University of Tennessee freshmen. School & Society, 1921, 14, 136-138.

PURPOSE

To compare the physical characteristics and academic achievemant of smokers and nonsmokers.

SUBJECTS

From a freshmen class of 250, at the University of Tennessee, the investigator selected 152 who said they rarely or never used tobacco and 79 who said they used tobacco more than rarely. Nineteen were omitted from study as doubtful.

METHOD

The averages of smokers and nonsmokers in a number of characteristics were compared.

FINDINGS

Smokers tended to be older in age, shorter in height, heavier in weight, and smaller in chest expansion. Holding age and height constant, however, a larger proportion of the smokers were underweight.

The average college grade for smokers during the first term was lower than that for the nonsmokers. Whereas twenty-four of the smokers failed courses, only two of the nonsmokers did so.

COMMENTS

There is the possibility that some of the students who smoked may have denied smoking. If so, with real smokers contaminating the "non-smokers" category, chances are that the reported differences would have been greater.

10051298 34

Source: https://www.industrydocuments.ucsf.edu/docs/knk0000

Horn, D., Courts, F. A., Taylor, R. M., & Solomon, E. S.
"Cigarette Smoking among high school students"
American Journal of Public Health (1959) 49: 1497-1511

PURPOSE

A study, for the Medical Affairs Department of the American Cancer Society, to gain information on (a) the amount and patterning of smoking among school students, (b) factors distinguishing smokers and non-smokers, (c) motivations for taking up smoking, and (d) the most effective approaches for influencing the smoking habits of school students.

SUBJECTS

11,060 boys and 10,920 girls in 11 public, 5 Catholic, and 5 suburban high schools in Portland, Oregon.

METHOD

Each of the 21,980 subjects responded to a questionnaire.

FINDINGS

The authors isolate two independent factors associated with the smoking habits of high school students: (a) parental smoking behavior, and (b) a cluster of personal traits (low participation in extracurricular activities, lack of scholastic success, and limited academic goals).

The proportion of smokers was greatest in the group where both parents smoked, least in that group where neither parent smoked (.0001 level). A higher proportion of boys smoked among those whose father was the only smoker than among those whose mother was the only smoker; the relationship was reversed among the girls.

Boys in coached athletics had fewer smokers than either nonathletes or noncoached athletes (.0001 level). The proportion of smokers was higher among nonparticipators in extracurricular activities (.0001 level).

Lack of scholastic success was measured by a student's age within his grade. There was a higher proportion of smokers among those students who were more than a year older than their classmates (.0001 level).

Limited academic goals were inferred from enrollment in a course of general mathematics rather than in a course in algebra, suggesting the absence of an intention to go to college. On the basis of this inference, there was a higher proportion of smokers among those who did not intend to go to college (.0001 level).

Other findings of the study include the following:

A higher proportion of smokers is to be found among students of the Catholic high schools than among students of the public high schools (.0001 level). A higher proportion of smokers is to be found among students of the public urban schools than among those of the public suburban schools.

The percentage of smokers is inversely related to the educational level of the parents (.0001 level). This difference is most pronounced in the early years of high school, suggesting to the authors of the study that, in families with a low parental education level, smoking is taken up at an earlier time; that is, education level of the parents may affect the age at which the children begin to smoke, but it may not affect the decision whether to smoke.

1005129835

Source: https://www.industrydocuments.ucsf.edu/docs/fank0000

Horn et al., Amer. J. Pub. Health 49: 1497-1511 (continued)

Filter cigarettes are most popular among the least frequent smokers. Those students who might be regarded as heavy smokers (more than half a pack a day) tend to choose non-filter cigarettes.

COMMENTS:

This article reports only the first stage of a large research project still in progress.

This appears to be the best study of adolescent smoking habits yet done.

1005129836

Source: https://www.industrydocuments.ucsf.edu/docs/knk0086

Hull, C. L. The influence of tobacco smoking on mental and motor efficiency: an experimental investigation. Psychol. Monog., 1924, 33, 1-161.

PURPOSE

To determine the effect of smoking on the efficiency of a dozen typical mental and neuro-muscular functions.

SUBJECTS

Eighteen males, aged 19 to 30 years. Nine were occasional smokers or abstainers (though physiologically tolerant of tobacco), and nine were heavy or habitual smokers.

METHOD

Subjects smoked from a large pipe for 25 minutes, one and a half hours after a meal, not inhaling. Effects were observed up to one hour and forty-five minutes after the end of smoking. Under experimental conditions, the subjects smoked mild tobacco. Under control conditions, they smoked warm, moist air from a specially contrived pipe. Subjects had, at all times, the illusion of actually smoking tobacco.

Each subject smoked and was tested for eighteen consecutive days, alternating experimental and control conditions according to a fixed pattern designed to avoid arousing suspicion and to neutralize any tendency toward practice effects.

Subjects were tested once before smoking and three times after smoking. Results were analyzed as differences from the "normal test" - i.e., from the performance before smoking.

FINDINGS

After smoking tobacco, there was a marked and uniform gain in the rate of mental addition, but no measurable effect on accuracy.

In repeating a sequence of digits given by the experimenter, the subjects showed a greater loss of memory span after smoking.

In learning to associate geometrical shapes with nonsense syllables, there was a loss in efficiency immediately after smoking.

After smoking tobacco, there was a slight increase in the reaction time of reading aloud isolated words and nonsense syllables.

In cancelling particular letters in a series of letters, no measurable effect of smoking could be found other than a very slight gain in accuracy at the expense of a very slight loss in speed.

The mental addition and reaction-time tests "may be presumed to give some indication of the effects of smoking upon ordinary routine thinking, which is essentially the functioning of old associative bonds. The evidence in this case is favorable to tobacco where the subject is an adult and is accustomed to its use." The rote learning and memory span tests presumably indicate "the effect that tobacco is likely to have where new associative bonds are in the process of formation, as in most school learning. The results in this case, while not so reliable, are unfavorable to tobacco ."

2005129837

Source: https://www.industrydocuments.ucsf.edu/docs/tnnk0000

Hull, C. L., 1924 (continued)

COMMENTS

Fisher (1927, pp. 14-18) argues that "it cannot be taken for granted. . .that the giving of numerous suggestions to the subject to the effect that he was smoking in the face of certain sensory contradiction, which certainly some of the reactors experienced, left him in an entirely normal state of mind."

2005129838

Source: http://www.industrydocuments.ucsf.edu/docs/mnk0000

Husband, R., & Godfrey, Jane. "An Experimental Study of Cigarette Identification". J. Appl. Psychol., 1943, 18, 220-223.

PURPOSE

To determine whether habitual smokers of one brand can identify their brand through taste alone.

SUBJECTS

Fifty-one individuals, of whom 44 smoked one of three leading brands.

METHOD

The subject, while blindfolded, selected one of four cigarettes placed on a tray before him. After smoking it, he was asked to identify the brand or, if he could not do that, to say whether it was the brand which he usually smoked. Trials were separated by several minutes, and mints were provided to reduce taste interference from one trial to the next.

FINDINGS

Brands were identified with somewhat greater accuracy than chance, even after excluding from computations the identifications of a mentholated brand. Smokers correctly identified their own brands 31 per cent of the time.

COMMENTS

The data are presented but no levels of significance are given for the results.

A more recent study of this problem is reported in Hammond et al. (1950).

100512983

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Johnston, L. M. Tobacco smoking and nicotine. Lancet, 1942, 2, 742.

PURPOSE

To compare the effects of smoking tobacco with the effects of hypodermic injection of nicotine.

FINDINGS

Whereas smokers almost always thought that the sensation following injection of nicotine was pleasant, nonsmokers usually found it "queer."

ADAPTED FROM SECONDARY SOURCE

Finnegan, Larson & Haag (1945)

1005129840

Source: https://www.industrydocuments.ucsf.edu/docs/fmxk0000

Johnston, L. Tobacco smoking as a form of self-destruction--individual and communal. Med. World Lond., 1945, 63, 14-16.

1005129841

Source: https://www.industrydocuments.ucsf.edu/docs/mnk0000

Jones, A. P. Cigarette smoking at school. Lancet, 1957, 1, 631.

PURPOSE

To determine the smoking habits of a group of English students.

SUBJECTS

A group of 307 boys, aged 11 to 16 years, at an English secondary school in a working class area.

METHOD

Each subject was questioned on his smoking habits in the presence of his teacher and classmates.

FINDINGS

Thirty-eight per cent said that they had smoked prior to entering school at eleven years of age.

The proportion of those who described themselves as regular smokers rose from 27 per cent at ages 12-13 to 45 per cent at ages 14-15. The majority of these regular smokers smoked less than ten cigarettes a week.

COMMENTS

The investigator acknowledges that reports may have been exaggerated because of social pressure from classmates in some cases or minimized because of social pressure from teachers in others.

100512842

Source: https://www.industrydocuments.ucsf.edu/docs/nmnk0030

Kay H.W. & Karpovich, P.V. Effect of smoking upon recuperation from local muscular fatigue. Res. Quart. Amer. Ass. Hlth., 1949, 20, 250-256.

SUBJECTS: Habitual smokers.

FINDINGS:

Smoking one cigarette had no effect on recovery from local fatigue of flexors of the hand.

ADAPTED FROM SECONDARY SOURCE: Psychol. Abstr.

1005129843

Source: https://www.industrydocuments.ucsf.edu/docs/mnpk0068

Keith, C. & Newsome, J. Quantitative studies on cigarette smoke, I. An Automatic smoking machine. Tobacco, 1957, 144 (13), 26-32.

COMMENTS

This paper deals with the description of machines that 'smoke' cigarettes and produce cigarette smoke thereby. These machines may be useful for psychological research when animals are used as subjects, such subjects not having a cultural heritage surrounding the use of manufactured tobacco products. They may also be useful in studies using human subjects where the experimenter wishes to study the immediate effect of tobacco smoked on a psychological process, and eliminate the effects of the activity of the hands, sucking, etc. that go along with the act of smoking. This article contains a bibliography on other methods used to produce cigarette smoke.

1005129844

Source: https://www.industrydocuments.ucsf.edu/docs/phnk0000

Kenyon, O.A. Theory and facts of cigarette smoking. Louisville, Ky.; Axton-Fisher Tobacco Co., 1934.

1005129845

Source: https://www.industrydocuments.ucsf.edu/docs/mmk0000

Kirchoff, Helen, & Rigden, R. H.
"Smoking Habits of College Students in Texas"
Texas Reports on Biology and Medicine (1954) 12:292-299

PURPOSE

To obtain data on the smoking history and habits of college students according to age, sex, and race.

SUBJECTS

A sample of 6,374 undergraduate and graduate students at 11 Texas colleges and universities. These were volunteers from a population of 8,500 students available for interview. The age range was from 15 to 40, but the greater number of students was in the category 15-24.

METHOD

The researchers administered a questionnaire to large assemblies of students.

FINDINGS

For all students, there was a higher proportion of smokers among males than among females, and a higher proportion of smokers among Negro females than among white females. The proportion of smokers among Negro males and white males was roughly the same.

Among those in the youngest age category (15-19), there was a higher proportion of smokers among males than among females, and a higher proportion among Negroes than among whites (both male and female). The authors infer that males begin to smoke at an earlier age than females, and that Negroes begin to smoke at an earlier age than whites.

COMMENTS

Response to the questionnaire was voluntary, and, although there was a 75% return, there may be some biases in the data. One or more groups of smokers or non-smokers may have been reticent about divulging information on their smoking habits. This might, for instance, increase or wipe out the observed difference in smoking habits between races.

1005129846

Source: https://www.industrydocuments.ucsf.edu/docs/nmnk0000

Koponen, A. Relating personality characteristics to purchasing. Paper read at Esomar Wapor Congress, Brighton, England, September 8, 1959.

PURPOSE

To relate consumer habits and expressed psychological needs.

SUBJECTS

8,900 individuals in a sample of 5,000 families.

METHOD

Subjects responded to a questionnaire containing scales of psychological needs and questions regarding purchasing behavior.

FINDINGS

Heavy smokers showed greater needs relating to sex, aggression, achievement and dominance and smaller needs relating to association, self-depreciation, order, and compliance than did other smokers ($p < .01$). Filter cigarette smokers showed greater needs relating to dominance, change, and achievement and smaller needs relating to aggression, self-depreciation, and autonomy than did smokers of cigarettes without filters (significance level not stated).

COMMENTS

The author does not specify the nature of the expressed psychological needs beyond naming them. It is, therefore, difficult to interpret the observed relation between these needs and smoking habits.

1005129847

Source: https://www.industrydocuments.ucsf.edu/tobacco

Koskowski, W.
The Habit of Tobacco Smoking
London: Staples, 1955 (292 pp.)

PURPOSE

To describe the historical effects of the discovery of tobacco and to review present-day medical knowledge on the influence of tobacco on the human organism.

METHOD

Analysis of historical documents and review of medical literature on tobacco.

FINDINGS

The historical review discusses the discovery of tobacco, the methods of consumption, the diffusion of the tobacco habit throughout the world, the uses of tobacco in primitive religion and medicine, opinions regarding tobacco and its effects.

The part of the book regarding the action of tobacco and its compounds on the human body discusses the chemical composition of tobacco and tobacco smoke, the effects of nicotine, the effects of smoking on the heart, circulation, respiratory system, digestive tract, peripheral nervous system, intellect, glands and tumours.

COMMENTS

This is a thorough and useful reference work. There is an extensive bibliography.

10051298

Source: http://www.industrydocuments.ucsf.edu/docs/jnnk0000

Langer, Maria. Sobre un detalle insignificante: el fumal durante el analisis (On an insignificant detail: smoking during the analysis). Rev. Psicoanal., B. Aires, 1946, 4, 220-223.

ADAPTED FROM SECONDARY SOURCE: Psychol. Abstr.

1005129849

Source: https://www.industrydocuments.ucsf.edu/docs/nnnk0000

Larsen, P.S., Finnegan, J.K., & Haag, H.B. Observations on the effect of cigarette smoking on the fusion frequency of flicker. J. clin. Invest. 1950, 29 (4), 483-485.

FINDINGS

One cigarette, after a period of abstinence, is followed by an increase in the critical fusion frequency. The effect is reduced after continued smoking.

ADAPTED FROM SECONDARY SOURCE: Psychol. Abstr.

1005129850

Source: https://www.industrydocuments.ucsf.edu/docs/zhrk0088

Larson, P.S., Haag, H.B., & Silvette, H. Measurement of tobacco smoking. Medical Times, April 1960

PURPOSE

To present the problems involved in determining the effect of tobacco smoking in clinical investigations and epidemiological surveys.

METHOD

Discussion of classifications of tobacco consumption that have been used in a large number of studies.

FINDINGS

Most studies have used inadequate measures of smoking rates. The number of cigarettes smoked is of less importance than the manner in which they are smoked. The length of cigarette burned into the mouth, inhaling rather than mere puffing, and individual variations in sensitivity and susceptibility to tobacco are important factors.

Because of varying definitions, the terms light, moderate, heavy, and excessive in regard to smoking can be misleading. In comparing studies, one should avoid these terms and deal with number of units.

The term average smoker seems to be meaningful only in the sense of a non-excessive smoker.

COMMENTS

This paper is 'must' reading for anyone preparing a study in which rate of smoking is an important variable.

100512851

Source: https://www.industrydocuments.ucsf.edu/docs/ynnk0000

Laufer, B.
Introduction of Tobacco in Europe
Chicago: Field Museum, 1924a
(Anthropology Leaflet 19) (66 pp.)

PURPOSE

To give a brief, nontechnical account of the introduction of tobacco into Europe.

METHOD

Analysis of historical documents.

FINDINGS

The author credits Sir Francis Drake with having introduced tobacco into England in 1573. Pipe-smoking, snuff-taking, and tobacco-chewing are discussed. The chewing of tobacco seems to have been limited in England to medical purposes; it was used in 1665 to ward off the plague. The appearance of the cigar and the cigarette in England are attributed to military campaigns.

Tobacco was introduced into France in the form of snuff, and snuff remained the predominant form of tobacco consumption there until the 19th century.

COMMENTS

This work draws heavily on the books by Fairholt (1859), Penn (1902), and Apperson (1914). It is, however, a good summary and does contribute some new ideas.

100512852

Source: https://www.industrydocuments.ucsf.edu/docs/hnnk0000

Laufer, B. Tobacco and its use in Africa. Chicago; Field Museum, 1930 (Anthropology Leaflet 29). (45 pp.)

10051298853

Source: https://www.industrydocuments.ucsf.edu/docs/nnnk0000

Laufer, B.
Tobacco and Its Use in Asia
Chicago: Field Museu, 1924b
(Anthropology Leaflet 18) (39 pp.)

PURPOSE

To give a brief, nontechnical account of the introduction and use of tobacco in Asia.

METHOD

Analysis of anthropological and historical materials.

FINDINGS

Tobacco appeared almost simultaneously throughout Asia in the early 17th century. The author sees three movements in the introduction of tobacco into Asia: (a) from Mexico to the Philippines via the Spanish to China to Siberia; (b) from South America to Portugal to Java, Japan and India; (c) from the Americas to Europe to Russia to Siberia.

As in Europe, tobacco in Asia was used first as a medicine and used first by the military.

". . . opium-smoking sprang up as a sequel to tobacco-smoking not earlier than the beginning of the eighteenth century." Originally, a mixture of tobacco and opium was smoked; later, pure opium was used.

Tobacco chewing is localized to that area where people also chew betel.

COMMENTS

This is one of the few books available on the use of tobacco in Asia.

100512985

Source: https://www.industrydocuments.ucsf.edu/docs/nmnk0000

Lawton, M. P. and Goldman, A. E. Cigarette smoking and attitude toward the etiology of lung cancer. Paper read at the meetings of the American Psychological Association, Washington, D. C., August 29, 1958.

PURPOSE

To investigate the extent to which involvement in lung cancer research and opinions about lung cancer are associated with smoking habits.

SUBJECTS

Eighty-five scientists engaged in lung cancer research matched for age and sex with an equal number of experimental psychologists.

METHODS

Subjects responded to a mail questionnaire regarding personal smoking habits and opinions on lung cancer and smoking.

FINDINGS

Responses were received from 77 of the cancer scientists and 72 of the psychologists, resulting in 72 matched pairs.

In the 66 pairs where data were available, 55 cancer scientists and 42 psychologists held the opinion that smoking is one of the causes of lung cancer. In 33 matched pairs of smokers, 27 cancer scientists and 19 psychologists felt that smoking was a cause of lung cancer.

A significantly large number of cancer scientists had never smoked. A significantly smaller number of cancer scientists now smoked. Cancer scientists who smoked smoked a significantly smaller amount of tobacco.

COMMENTS

The long standing difference in smoking rate suggests the possibility that a selective process operates in determining who is likely to become involved in research on the relationship of lung cancer and smoking.

1005129855

Source: https://www.industrydocuments.ucsf.edu/docs/mmk0000

Lewis, A. B.
Use of Tobacco in New Guinea and Neighboring Regions
Chicago: Field Museum, 1924
(Anthropology Leaflet 17) (10 pp.)

PURPOSE

To give a brief, nontechnical account of the current use of tobacco in Melanesia.

METHOD

Analysis of anthropological materials.

FINDINGS

Tobacco is used as a medium of exchange among some natives of this area.

Some groups inhale the smoke of a strong variety of tobacco from a bamboo pipe, experiencing a severe physiological reaction: choking, perspiration, tears, nausea, faintness, and sometimes unconsciousness.

COMMENTS

This appears to be the only systematic survey of tobacco use in the Pacific.

100512956

Source: https://www.industrydocuments.ucsf.edu/docs/fmnk0000

"Smokers May Have Neurotic Tendencies, Buffalo Study Shows"
Advertising Age (August 4, 1958) 29:2+

This is a brief report of the study by Lilienfeld (1959).

1005129857

Source: https://www.industrydocuments.ucsf.edu/docs/nnnk0000

Lilienfeld, A. M. Emotional and other selected characteristics of cigarette smokers and nonsmokers as related to epidemiological studies of lung cancer and other diseases. J. National Cancer Institute, 1959, 22, 259-282.

PURPOSE

To determine whether emotional or other characteristics may be of aetiological significence in the observed association between smoking and disease.

SUBJECTS

Analysis is done of 903 matched pairs of smokers and nonsmokers, taken from a sample of 4,456 persons over the age of eighteen years in Buffalo and Kenmore, New York. Three-fourths of the matched pairs were females, due to the relatively small proportion of male nonsmokers with whom male smokers could be matched. Matching was done on the basis of age, sex, race, and social status.

METHOD

Subjects were interviewed in their homes.

FINDINGS

In a number of items derived from S. A. Stouffer et als. (Measurement and Prediction, 1950), the smokers differed significantly from the nonsmokers in the direction of being more "neurotic." For example, more smokers ($p < .001$) said that they:

(1) sometimes felt like smashing things for no good reason;
(2) resented being told what to do;
(3) were bothered by trembling hands;
(4) were bothered by nervousness;
(5) were so annoyed by others that they sometimes acted contrary to what others wanted them to do;
(6) told people to mind their own business;
(7) suffered from sweating hands;
(8) suffered from shortness of breath;
(9) regretted saying things after they had been said;
(10) bit their fingernails as children; and
(11) got blue and discouraged and wondered whether anything was worthwhile.

Smokers were more active than nonsmokers in hunting, baseball, fishing, basketball, and golf.

A larger proportion of nonsmokers had foreign-born parents ($p < .001$).

Smokers changed jobs more often, remarried more often, and were hospitalized more often ($p < .001$). They also tended to change residence more often ($p < .10$).

The author suggests that a "self-selection" process may account for the observed association between smoking habits and lung cancer-- that the "neurotic" characteristic of smokers may be the more important factor in the aetiology of lung cancer.

1005129858

COMMENTS

The finding that smokers tend to be more "neurotic" may be due to the high proportion of females in the group analyzed. Since fewer females smoke in the population, those that do may be more "neurotic" than those who do not.

Source: http://www.industrydocuments.ucsf.edu/tobacco/1005...

Lilienfeld, 1959 (continued)

The findings on "neurotic" traits are less significant for the subgroup of 239 men in the sample, but it is hard to determine whether this is due to the smaller sample size or to an actual lower incidence of these traits in male smokers.

100512985S

Source: https://www.industrydocuments.ucsf.edu/docs/hnnk0000

Linton, R.
Use of Tobacco among North American Indians
Chicago: Field Museum, 1924
(Anthropology Leaflet 15) (27 pp.)

PURPOSE

To give a brief, nontechnical account of tobacco use among North American Indians prior to the discoveries of Columbus.

METHOD

Analysis of anthropological materials.

FINDINGS

Tobacco was not used outside the Western Hemisphere before the discovery of the Americas by the Europeans.

Except for a group of tobacco chewing Indians on the Northwest coast, North American Indians smoked pipes exclusively. Alaskan Eskimos acquired the smoking habit from Siberia after the introduction of tobacco into Europe and Asia.

European settlers in America probably did not learn the chewing habit from the Indians, but may have acquired it from the Spanish who early encountered tobacco chewing Indians in South America.

COMMENT

This is a good survey of materials on the subject.

100512860

Source: http://www.industrydocuments.ucsf.edu/tobacco

Literary Digest. "Will your son smoke?" Literary Digest, 1926 (September 18), 87, 26.

In an editorial, the statement is made that "By smoking himself, the father increases by twenty per cent the probability that his son will be smoking when he is a college student."

100512961

Source: https://www.industrydocuments.ucsf.edu/tobacco/

Lynn, R. A study of smokers and nonsmokers as related to achievement and various personality characteristics. In Univer. of N. Carolina Record, research in progress. . . 1948, Chapel Hill, North Carolina, 1949, 464, 164. (Grad. Sch. Ser. # 56). (Abstract of M.A. thesis).

1005129862

Source: https://www.industrydocuments.ucsf.edu/docs/mnkw0000

Macht, D. I., and Bloom, W. Comparative study of ethanol, caffeine, and nicotine on behavior of albino rats. Proceedings of the Society for Experimental Biology and Medicine, 1921, 18, 99-100.

This an abstract of the study by Macht, Bloom and Giu Ching Ting in the American Journal of Physiology, 1921.

10051298G3

Source: https://www.industrydocuments.ucsf.edu/docs/xxxxxx

Macht, D. I., Bloom, W., & Giu Ching Ting. Comparative study of ethanol, caffeine and nicotine on the behavior of rats in a maze. Amer. J. Physiol., 1921, 56, 264-272.

PURPOSE

To determine the effects of ethanol, caffeine, and nicotine on the maze behavior of rats.

SUBJECTS

Forty albino rats, mostly male, aged two to six months.

METHOD

After running a circular maze through three successive errorless trials, the rats received injections of ethanol, of caffeine, and of nicotine in saline solution. Saline solution and distilled water were used for control purposes.

FINDINGS

None of the drugs produced any improvement or stimulation in behavior. All three had a depressant effect, nicotine being the most toxic and ethanol the least toxic.

Rats injected with nicotine showed "slower progression and failure in discrimination and memory." The depression was sometimes delayed in its appearance and sometimes persisted for two days.

1005129864

Mackenzie, C.
Sublime Tobacco
New York: Macmillan, 1958 (352 pp.)

A well-written history of tobacco by an ardent protagonist of the smoking habit. It does not, however, cover the history of tobacco more thoroughly than earlier histories by Apperson and Corti. There is a very brief bibliography.

100129865

Source: http://www.industrydocuments.ucsf.edu/tobacco

Mason, J. A.
Use of Tobacco in Mexico & South America
Chicago: Field Museum, 1924
(Anthropology Leaflet 16) (15 pp.)

PURPOSE

To give a brief, nontechnical account of tobacco use among Indians of Mexico and South America.

METHOD

Analysis of anthropological materials.

FINDINGS

Although he acknowledges a lack of evidence in support of his view, the author suggests that a logical sequence for the evolution of smoking practices would be cigar, cigarette, tubular pipe, elbow pipe. He contends further that religious and medical uses of tobacco antedate recreational uses.

Evidence of tobacco consumption by means of cigars, cigarettes, pipes, chewing, snuffing, licking, and drinking is to be found in the area studied. The chewing of tobacco seems to have been localized in a territory where the Indians also chewed coca. In those places where tobacco was snuffed, the Indians also used the powder of other plants as snuff.

COMMENTS

The evolutionary notions seem somewhat unfounded. The absence of the 'logically prior' cigar and cigarette from areas like North America argues against the view that they appear before pipes. Moreover, the cigar and the cigarette seem more recreational and less religious in their use than the pipe, and the author himself suggests that religious uses precede recreational uses. The evolutionary theory, further, says nothing of the practices of chewing, snuffing, drinking, and licking. In summary, there is no evidence to support the view, and there is some evidence to cast doubt on it.

2005129866

Digitized by https://www.industrydocuments.ucsf.edu/tobacco/

Matarazzo, J. D., & Saslow, G. Psychological and related characteristics of smokers and nonsmokers. Psychol. Bull., 1960, 57, 493-513.

PURPOSE

To review studies of the characteristics of smokers and nonsmokers and to report the findings of new research in the area.

SUBJECTS

Forty psychiatric patients (nine smokers and 31 nonsmokers); 114 female student nurses (50 smokers and 64 nonsmokers); and 140 male and female undergraduates at a university (54 male and 17 female smokers; 38 male and 31 female nonsmokers).

METHOD

Interviews and tests.

FINDINGS

This article reviews the findings of other studies on the following characteristics and varables: sex, age, race, marital status, occupation, urban-rural residence, income, socioeconomic status, education, sports participation, psychological tension, suggestibility, emotional status, and reasons for beginning.

From a personal communication by F. A. Ianni and W. Boek, it is reported that a higher proportion of smokers was found among automobile drivers who had accidents than among a control group of nonaccident drivers drawn from the same population.

There was no significant difference in intelligence between smokers and nonsmokers in any of the three samples tested.

Smokers showed higher anxiety than nonsmokers among the student nurses ($p < .05$), the male undergraduates ($p < .05$), and the female undergraduates (n.s.).

Smokers reported a greater number of psychosomatic symptoms in all the groups ($p < .05$ for student nurses; n.s. for all others).

Among the student nurses and the male undergraduates, smokers tended to be heavier coffee drinkers ($p < .001$ for both groups) and heavier alcohol drinkers ($p < .05$ for student nurses; $p < .001$ for male undergraduates).

1005129867

Medical Record. The tobacco habits of school children. Medical Record, 1916, 90, 422.

A digest of Stiles and Richards, (1915).

1005129868

Source: https://www.industrydocuments.ucsf.edu/docs/mpkd0000

Medical Record. The use of snuff and tobacco by school children. Medical Record, 1913, 83, 1173.

A digest of Stiles and Altman (1913).

1005129869

Source: https://www.industrydocuments.ucsf.edu/tobacco/docs/

Moylan, G.L. The effects of smoking on college students, Pop. sci. Monthly, 1910, 77, 171.

PURPOSE

To investigate the correlation of smoking and scholorship.

SUBJECTS

Columbia students

ADAPTED FROM SECONDARY SOURCE: Parp (1931)

10051298?0

Source: https://www.industrydocuments.ucsf.edu/docs/

Mills, C. A. & Porter, Marjorie M.
"Tobacco Smoking Habits in an American City"
Journal of the National Cancer Institute (1952-1953) 13:1283-1297

PURPOSE

To determine whether the smoking habits of a general urban population are similar to those of hospital populations used in lung cancer studies.

SUBJECTS

A sample of 2,456 whites (from a population of 270,000) and 1,931 Negroes (from a population of 36,000) in Columbus, Ohio. There was a slightly higher proportion of females than males in the sample.

METHOD

Interviews were conducted in homes. Questions were asked regarding age, sex, race, type and extent of smoking.

FINDINGS

Cigarette smoking is most common in young adults; cigars and pipes are more common among older males than among others.

Cigarette smoking is most common in the poorer sections of the city. Pipes and cigars are most common in suburban areas.

Cigarette smoking is more common among Negroes than among whites.

The authors find a higher incidence of tobacco smoking in patients with various diseases (determined in other studies) in comparison with this sample from the general population. They conclude that hospitalized or ambulant clinic patients should not be used as controls in analyses of relations between smoking and disease.

COMMENTS

The researchers took care to sample proportions of the white and Negro populations that would make meaningful statistical comparison possible. However, the report does not specify the method by which subjects were chosen. Without such information, the findings are difficult to evaluate.

1005129871

Source: https://www.industrydocuments.ucsf.edu/tobacco/docs/

Moucorps, P. Tabagisme et travail (Nicotine and work). Travail et Methodes, 1949, 19, 38-39.

FINDINGS

The studies of Hull, Mcfarland, Edwards, Malmejac, and others are summarized. It is emphasized that in those studies only certain factors of the effects of tobacco are observed, and that the study of other factors might greatly change the picture.

ADAPTED FROM SECONDARY SOURCE: Psychol. Abstr.

1005129872

Source: https://www.industrydocuments.ucsf.edu/docs/mmkp0000

Newton, R. C. The use of tobacco by schoolboys. Boston Med. & Surg. J., 1909, 161, 237-238.

In a letter to the editor, a physician expresses the opinion that smoking is not only harmful to the adolescent but also to the adult. He writes: "So long as the habit shall be spoken of by high authority as harmful to the weak and immature, but pleasant and profitable to the adult, the small boy will look upon himself as exceedingly manly just as soon as he can smoke without being made sick."

100512873

Source: https://www.industrydocuments.ucsf.edu/docs/

Nilsen, E. Smoking habits among school children in Norway. Brit. J. Prev. & Soc. Med., 1959, 13, 5-13.

PURPOSE

To determine the pattern of smoking habits of Norwegian school children.

SUBJECTS

A nationwide sample of 9,291 children, aged 13 to 19 years.

METHOD

The populations of a sample of schools throughout Norway were surveyed by anonymous questionnaires.

FINDINGS

There were more smokers (a) among males than females, (b) among the older than the younger, (c) among the urban than the rural, and (d) among students at continuation and vocational schools than among students at general secondary schools. (Continuation schools are for those who plan no further education, and vocational schools are evening schools for working children.)

Daily consumption increased with age.

COMMENTS

This is not representative of Norwegian children, since a large proportion leave school. Only ten per cent are still attending school at 19 years of age.

1005129874

Source: https://www.industrydocuments.ucsf.edu/docs/mmkn0000

O'Shea, M. V. Tobacco and Mental Efficiency. New York: Macmillan, 1923. (xx & 258 pp.)

PURPOSE

To present the findings of several studies regarding the association between smoking and mental efficiency.

METHOD

O'Shea analyzes three kinds of data. First, he reviews opinions from literature, the smoking habits of prominent persons in history, and statements solicited by O'Shea from a number of "men and women of distinction." He then reports studies of smoking and scholarship obtained by surveys or from analysis of college and school records. Finally, he reviews several experimental studies and describes the experiment by Hull (1924).

FINDINGS

"Men of distinction" tend to say that they have observed no detrimental effects from the use of tobacco.

After reviewing a number of studies at various schools and colleges, O'Shea concludes: "It is a significant fact that in every one of the foregoing reports smokers are shown to be inferior to nonsmokers in the work of school and college."

Results from an analysis of 206 mail questionnaires from a group of 1,000 sent to high school principals in five Middle West states show that a larger proportion of smokers in all schools were reported below the median in grades and deportment. A larger proportion of smokers in all schools had declined in scholarship and deportment since beginning to smoke.

The data from 70,000 school records in twelve cities indicate that smokers tended to score higher on intelligence tests. "The results show as conclusively as intelligence tests can show that the smokers, taken as a group, are not inferior to the nonsmokers in native intelligence, but if anything they are superior to them." For 2,000 of the cases, the correlation between smoking and scholarship was found to be -.51. No detail is given regarding the method by which this correlation coefficient was determined.

"It is conceivable that tobacco addiction leads to addiction in other self-indulgent and intellectually depressing ways, or it may be the other way around; but allowing for the detrimental influence of all these addictions operating with tobacco, there is still left an important measure of harmful effect that must be due to tobacco alone."

O'Shea reviews experimental studies of tobacco and mental efficiency, criticizing them for their failure to eliminate interest, deprivation, and suggestion. He then favorably reviews Hull's experiment (See Hull, 1924). He finds the results inconclusive, but maintains that "it can be said that, taking a large number of individuals, tobacco will slow down and disturb the intellectual process of the majority of them." He points out that Hull's experiment does not investigate long-range effects or possible effects on "passive meditation," "creativity," "alertness," "judgment," or "ambition."

1005129875

Source: https://www.industrydocuments.ucsf.edu/docs/...

Pack, F. J. Smoking and football men. Popular Science Monthly, 1912, 81, 336-344.

PURPOSE

To determine the pattern of smoking habits among college football players and the correlates of those habits.

SUBJECTS

A group of 248 football players at fourteen colleges and universities throughout the country.

METHOD

Mail questionnaires were filled out and returned to the investigator by coaches and athletic directors.

FINDINGS

Fifty-six per cent of the football players were nonsmokers.

Nonsmokers were more successful than smokers in making the first team. Sixty-six per cent of the nonsmokers who "tried out" made the team, while only thirty-three per cent of the smoking candidates did.

Nonsmokers had a higher average grade than smokers. In each of twelve colleges, the nonsmokers had a higher average grade.

10051298 76

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Pearl, R. Tobacco smoking and longevity. Science, 1938, 87, 216-217.

SUBJECTS

A sample of 6813 white males, including heavy, moderate and non-smokers.

FINDINGS

Smoking was associated with a decrease of life duration. The amount of impairment increased as the amount of smoking increased.

ADAPTED FROM SECONDARY SOURCE

Psychol. Abstr.

10051298?7

Source: https://www.industrydocuments.ucsf.edu/docs/xxxxxxxx

Pechstein, L. A., & Reynolds, W. R. "The effect of tobacco smoke on the growth and learning behavior of the albino rat and its progeny." J. comp. Psychol., 1937, 24, 459-469.

PURPOSE

To investigate the effects of tobacco smoke on the fertility of the albino rat and the growth, body size, inherited characteristics, and maze learning of its progeny.

SUBJECTS

Two experimental groups and one control group drawn from 168 albino rats.

METHOD

Subjects in the experimental groups were fumed with tobacco smoke in a specially constructed apparatus. Observations of the progeny were taken for four generations.

FINDINGS

Animals fumed for a short length of time were more prolific than control subjects. Prolonged fuming reduced litter size and the viability of offspring. Negative effects cumulated through four (4) generations.

Maze learning of animals fumed for a short time was better than that of controls with respect to speed but not to errors. Subjects fumed for long periods learned more slowly and made more errors than the controls. Negative effects again cumulated through four generations.

2051298878

Source: http://www.industrydocuments.ucsf.edu/docs/snbn0000

Penn, W.A. The soverane herb: a history of tobacco. London; Grant Richards, 1901. (x & 326 pp.)

100512979

Source: https://www.industrydocuments.ucsf.edu/docs/fmkf0000

Phillips, H. C. The immediate effect of tobacco smoke on the learning ability of albino rats. J. comp. Psychol., 1937, 24, 471-486.

PURPOSE

To study the effect of tobacco smoke on the maze learning ability of albino rats.

SUBJECTS

Albino rats.

METHOD

A multiple Y-maze and an alternation problem were used to compare the learning ability of rats subjected to tobacco fumes for 45 minutes daily with that of their litter mate controls. Fuming immediately preceded the trial. Different concentrations of tobacco were used with two groups.

FINDINGS

Learning curves and critical ratios failed to disclose differences in the performance of "smokers" and "nonsmokers."

1005129880

Source: https://www.industrydocuments.ucsf.edu/docs/hwfh0000

Powers, S. R. A comparison of the intelligence and the achievement of high school boys who smoke with those who do not. School and Society, 1921, 13, 299-300.

PURPOSE

To determine the relation between scores on intelligence tests, grades in classes, and smoking or nonsmoking among high school boys.

SUBJECTS

Fifty students at the University High School of the University of Arkansas.

METHOD

Intelligence test scores from three tests administered at the beginning of the school year and a numerical grade score derived by weighting the grades received in classes during the first quarter were compared for smoking and nonsmoking students.

FINDINGS

"In the University High School the intelligence level of the boys who smoke is . . . 15 per cent lower than that of those who do not smoke. Those who smoke are 30 per cent lower in ability to do school work than those who do not."

1005129881

Source: https://www.industrydocuments.ucsf.edu/docs/...

Prothro, E. T. Identification of American, British, and Lebanese cigarettes. J. appl. Psychol., 1953, 37, 54-56.

PURPOSE

To determine whether cigarette brands can be identified by taste alone.

SUBJECTS

Fifty male Lebanese college students.

METHOD

The subjects were presented initially with the names of the six brands they were to identify. Identifications were made while the subjects were blindfolded. A wooden cigarette holder was used, the room was well ventilated, and subjects rinsed their mouths with water during periods of two minutes between trials. Subjects were not allowed to change their identifications.

RESULTS

Sixty per cent of all identifications were correct ($p < .001$). Each brand was identified significantly better than chance.

COMMENTS

The author points out that the tendency of Lebanese students to vary their brands more frequently than do American students might explain the difference of these results from those of American studies.

100512882

http://www.industrydocuments.ucsf.edu/docs/

Prothro, E.T. Identification of American, British, and Lebanese cigarettes. J. appl. Psychol., 1953, 37, 54-56.

SUBJECTS: Fifty male students

METHOD

Subjects were asked to discriminate among two American, two British, and two Lebanese brands of cigarettes.

FINDINGS

Sixty per cent of all attempts were correct (signif.). Non-preferred brands were identified correctly as often as were preferred brands.

ADAPTED FROM SECONDARY SOURCE: Psychol. Abstr.

2005129883

Source: https://www.industrydocuments.ucsf.edu/docs/sbnb0000

Raven, R. W. Smoking habits of schoolboys. Lancet, 1957, 1, 1139-1141.

PURPOSE

To determine the smoking habits of English schoolchildren.

SUBJECTS

An unspecified number of students of 141 schools (preparatory, secondary, grammar, and public) in 13 English counties.

METHOD

Information supplied by headmasters.

FINDINGS

"Early smokers are usually boys in the 'B' and 'C' streams, who, being undistinguished scholastically, want to assert themselves otherwise."

"Many headmasters regarded smoking as a gesture of independence, a sign of emancipation and of maturity."

COMMENTS

This study might best be described as a survey of opinion among some English schoolmasters regarding the smoking habits of their students.

100512984

Source: https://www.industrydocuments.ucsf.edu/docs/nhdd0000

Reeves, W. E. & Morehouse, L. E. The acute effect of smoking upon the physical performance of habitual smokers. Res. Quart. Amer. Ass. Hlth. 1950, 21, 245-248.

1005129885

Source: https://www.industrydocuments.ucsf.edu/docs/fmnk0000

Rizk, A. Smoking among adolescents; an objective study. Egypt. J. Psychol., 1947, 3, 55-67 (English translation on 111-116).

10051298886

Source: http://www.industrydocuments.ucsf.edu/tobacco

Rizzilo, A. L'effet de la nicotine sur l'exitabilité de la substance blanche (The effect of nicotine on the excitability of the white substance, corona radiate). C. r. Soc. Biol. , 1928, 98, 132-134.

FINDINGS

The first two applications of nicotine reduced chronaxy, while additional applications increased it.

ADAPTED FROM SECONDARY SOURCE

Psychol. Abstr.

100512987

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Robert, J. C.
The Story of Tobacco in America
New York: Knopf, 1949 (xii & 296 pp.)

PURPOSE

To describe the growth of the tobacco industry in the United States and to "trace the effect of tobacco on the political, economic, and social life of the nation."

METHOD

Analysis of historical documents and literary references to tobacco.

FINDINGS

Chapter 4 summarizes the fashion trends in tobacco consumption in the United States. The colonial habit of pipe smoking was acquired from the Indians. Snuff entered American society through the immigration of 'snuffing' Englishmen and through frontier contact with the French of the Mississippi Valley. The French and Indian War is credited with assisting in the diffusion of the snuff habit. The Mexican War is similarly credited with the introduction of cigars. Chewing tobacco is described as a thoroughly American and thoroughly "democratic" habit: it is the only form of tobacco use brought into fashion by the working classes. The cigarette appeared in the latter part of the 19th century.

Chapter 4 suggests that wars accentuate the tobacco habit through: (a) absence of family restraints, (b) indulgence as an escape from the fatigues of military life, and (c) quickened imitativeness in the presence of large masses. It is maintained that the Civil War had added emphasis in spreading the tobacco habit, since so much military activity occurred in tobacco-growing regions.

COMMENTS

One of the better books on the history of smoking in America.

1005129888

Source: https://www.industrydocuments.ucsf.edu/docs/mmk0000

Roussel, P. & Weekers, R. Les modifications de la frequence critique de fusion au cours de l'intoxication par le tabac. (Modification of critical fusion frequency in the course of tobacco intoxication.) Int. J. Opthal. 1947, 113, 215-223.

10051289

Source: http://www.industrydocuments.ucsf.edu/tobacco/docs/

Ruckmick, C. Experiences during learning to smoke. Amer. J. Psychol., 1924, 35, 402-406.

PURPOSE

To describe the physiological and psychological sensations accompanying the first act of smoking.

SUBJECT

Author.

METHOD

A psychologist gives an introspective account of his first smoking experiences.

COMMENTS

The author's reports of his experiences may be of more value than the reports of smokers untrained in observational methods.

2005129890

Source: https://www.industrydocuments.ucsf.edu/docs/snvk0078

Sackrin, S. M. & Conover, A. G.
Tobacco Smoking in the United States in Relation to Income
(U. S. Dept. of Agriculture; Agricultural Marketing Service; Marketing Research Report 189)
Washington: U. S. Govt. Printing Office, 1957

PURPOSE

To provide information on characteristics of tobacco smoking in the United States in relation to income, cross-classified with age, region, residence, occupation, and industry.

SUBJECTS

A sample of about 18,000 drawn from the civilian, noninstitutionalized population over the age of 18.

METHOD

Data on smoking habits were obtained in the February 1955 survey of 40,000 persons by the Bureau of the Census. Income data were obtained in the April 1955 survey. Analysis was done on that part of the sample common to both surveys.

Smoking habits are analyzed in terms of: (a) cigarette, cigar, pipe; (b) regular (at least one a day), occasional; (c) current, discontinued, never-smoked; (d) exclusive (cigarette, cigar or pipe only), mixed (any combination of cigarettes, cigars and/or pipes); (e) rate of smoking (units per day).

FINDINGS

The total number of smokers in the United States in 1955 was estimated at 60 million, with 54 million of these smoking at least once a day.

The most common form of tobacco consumption was exclusive, regular cigarette smoking.

The factors of age and income together account for more than 90% of the observed statistical variance in the proportion of the male population regularly smoking cigarettes. "Age appears to be the most important factor affecting the percentage of males who smoke cigarettes regularly."

Sex, age, income, and residence tend, in general, to be the important variables. Region, occupation, and industry are less so.

The index of elasticity in the demand for cigarettes is computed at 0.12. A 10% increase in income is accompanied by an increased expenditure for cigarettes of 1.2%.

COMMENTS

Income data refers to personal income. It excludes non-money income, income from annuities, and income derived from another individual in the household or family. The effect of taxes and of family obligations is not taken into account. Personal income, then, is not a good measure of purchasing power, and, as the authors themselves admit, this renders the conclusions regarding income less meaningful.

Measurement in terms of units (cigarettes, cigars, and pipefuls) rather than cost neglects changes in quality of tobacco accompanying changes in income.

On the whole, however, this report and the companion report by Haenszel et al. (1956) constitute the best and most reliable data on tobacco smoking patterns in the United States.

1005129891

Source: http://www.industrydocuments.ucsf.edu/tobacco/docs/#id=

Sandwick, R. L. The use of tobacco as a cause of failures and withdrawals in one high school. School Review, 1912, 20, 623-625.

PURPOSE

To determine the relationship between smoking and scholarship.

SUBJECTS

A group of 156 students from Deerfield High School in Highland Park, Illinois; a group of 45 boys from the 62 who had left school without graduating; and all the graduates of the three years preceding the study.

METHOD

A senior, chosen with some care, did the study as a paper for an economics course. He interviewed students on their smoking habits, guaranteeing them anonymity, and analyzed these results with the school records.

FINDINGS

Of the 45 boys who had left school and could be interviewed, all were smokers. None of the graduates had been smokers.

There was an association between smoking and scholarship. The mean grade was highest for the group of students who had never smoked, followed by the mean grade of those who had discontinued smoking, the mean grade of those who were currently smoking and were in school, and finally the mean grade of those who were currently smoking and had left school. The ten boys highest in academic rank were nonsmokers.

"In the case of those students who had recently learned to smoke it was found that the time of acquiring the habit was registered by a slump in their marks."

". . . Probably the really able and ambitious boy knows better than to dissipate his energies in this way. The habit seems to fasten itself on the less capable and those of average ability."

2005129892

Source: https://www.industrydocuments.ucsf.edu/tobacco/docs/

Schubert, D. S. P. Personality implications of cigarette smoking among college students. J. Cons. Psychol., 1959, 23, 376.

PURPOSE

To test several hypotheses derived from psychological theory regarding the personality of smokers.

SUBJECTS

A group of 92 male and 134 female college freshmen, including 47 male smokers and 51 female smokers.

METHOD

Comparison of the scores of smokers and nonsmokers on four scales of the Minnesota Multiphasic Personality Inventory (MMPI).

FINDINGS

Smokers tended to get higher scores on the Ma scale ($p < .001$ for males; $p < .01$ for females). Female smokers tended to get higher scores on the D scale (n.s.), but male smokers tended to get lower scores. The results, therefore, are seen as supporting an hypothesis derived from Freud and Fenichel that smokers would tend to show manic tendencies, but did not support the companion hypothesis that they would also tend to show depressive tendencies.

Smokers tended to get lower scores on the Hy scale (n.s.). Though lacking statistical significance, this result is in the predicted direction that hysterical characteristics would vary inversely with smoking, an hypothesis derived from the findings of Vallance regarding suggestibility.

Smokers tended to get higher scores on the Pd scale ($p < .001$ for males; n.s. for females). This gave partial support to the hypothesis that smokers would tend to show psychopathic traits. This hypothesis was derived from the finding by Lynn that smokers had poorer disciplinary records in school.

1005129893

Source: https://www.industrydocuments.ucsf.edu/docs/pnnk0000

Schumann, L. M. Cold injury -- an epidemiologic approach. Bulletin of the University of Minnesota Hospital, 1955, 26, 400-415.

PURPOSE

To determine the aetiological factors in frostbite.

SUBJECTS

A group of 691 frostbite victims and 442 bunker-mate controls from soldiers in Korea during 1951 and 1952.

METHOD

Comparison of subjects and controls on a number of characteristics.

FINDINGS

More heavy smokers suffered from frostbite than light smokers. The author does not attribute prophylactic properties to abstinence from smoking, but rather suggests that personality factors may have aetiological significance for both smoking habits and susceptibility to frostbite.

100512894

Source: https://www.industrydocuments.ucsf.edu/docs/mnk48c00

Seaver, J. W. The effects of nicotine. Arena (Boston), 1897, 17, 470-477.

PURPOSE

To review what is known on the effects of nicotine on the human body.

METHOD

Reference to previous studies, some identified, others not identified.

FINDINGS

A study of entering students at Yale covering a period of nine years showed the smokers to be 15 months older, 1.4 kilograms heavier, 7 millimeters shorter, and 80 cubic centimeters smaller in lung capacity than nonsmokers. Other studies at Yale and Amherst showed smokers to be inferior to nonsmokers in weight, height, chest girth, and lung capacity.

". . . Out of our highest scholarship men only a very small percentage (about five) use tobacco, while of the men who do not get appointments over 60 per cent are tobacco users. But this does not mean that mental decrepitude follows the use of tobacco, for we may read the results in another way, viz.: the kind of mind that permits its possessor to become addicted to a habit that is primarily offensive and deteriorating is the kind of mind that will be graded low on general intelligence tests."

1005129895

Source: https://www.industrydocuments.ucsf.edu/docs/hmhk0000

Seltzer, C. C.
"Masculinity and Smoking"
Science (December 18, 1959) 130:1706-1707

PURPOSE

To determine whether there is any relationship between smoking habits and masculinity in body build.

SUBJECTS

A panel of 252 Harvard students in the years 1938-1942 (the Grant Study of Adult Development).

METHOD

Subjects were classified according to frequency of smoking and the "masculine component" determined by a scale of body-build developed by Seltzer.

FINDINGS

It is the author's observation that a weak masculine component was significantly more frequent among smokers than nonsmokers, and most frequent among heavier smokers. He suggests that the weakness of the masculine component may be relevant to the susceptibility of smokers to lung cancer and heart disease.

COMMENTS

This study is based on the same population used by McArthur et al. (1958) and by Heath (1958). The author states that his comments on the masculine component are not inconsistent with the findings of Heath on the differences between smokers and nonsmokers.

1005129896

Source: https://www.industrydocuments.ucsf.edu/docs/rmlk0000

Sheard, C. The effects of smoking on the dark adaptation of rods and cones. Fed. Proc. Amer. Soc. exp. Biol., 1946, 5 (1), Pt. 2, 94.

100512897

Source: https://www.industrydocuments.ucsf.edu/docs/mmk0000

Shur, M., & Rickards, J. Design and operation of a multiple cigarette smoking machine. Tobacco, 1957, 144, (4), 18-25.

See Keith and Newsome (1957) for comments, which apply also to this paper.

1005129898

Source: https://www.industrydocuments.ucsf.edu/docs/hnnk0000

Sinnot, J. J., & Rauth, J. E. Effect of smoking on taste thresholds. J. gen. Psychol., 1937, 17, 151-153.

PURPOSE

To determine the effects of smoking on taste thresholds for salt and sugar.

SUBJECTS

Six smokers who agreed to give up smoking for a period of time, and twelve individuals who had not smoked for five years.

METHOD

The taste thresholds for salt and sugar were determined before the subjects discontinued smoking and at intervals during the period of non-smoking.

RESULTS

The authors found that smokers' thresholds were higher during the smoking period than the nonsmoking period; these results are said to be "statistically reliable." The nonsmokers' thresholds were lower than those of the smokers during the nonsmoking period; this difference is considered by the authors to be nonsignificant.

COMMENTS

The authors do not report the specific methods or levels of the tests used to assess the statistical significance of their results.

1005129899

Source: https://www.industrydocuments.ucsf.edu/docs/nnmk0000

Spinden, H. J.
Tobacco Is American: The Story of Tobacco before the Coming of the White Man
New York: N. Y. Public Library, 1950 (xiv & 120 pp.)

PURPOSE

To review "the pre-Columbian place of tobacco in the light of archaeology, native histories and surviving ceremonies among the Indians of North, Central, and South America."

METHOD

Analysis of historical and anthropological material.

FINDINGS

"Tobacco, as a material to be smoked, existed in a vast continuous area which extended from Canada to Chile and from the Pacific to the Atlantic coasts. . . ." The history of tobacco is one "of spread and acceptance from an original American focus of invention. . . , the highland area of Central America, extending perhaps in Southern Mexico."

"The European and Asiatic nations tended to accept the kind of smoking with which they first became familiar modifying it now and then with new mechanical ideas or with new methods of preparing the herb."

COMMENTS

This is a good summarization, survey and bibliography of data on pre-Columbian practices.

1005129900

Source: https://www.industrydocuments.ucsf.edu/docs/fank0000

Steinhaus, A.H. & Grunderman, F.H. Tobacco and health. New York: Association Press, 1948.

This is a general review, written in a dramatic style. It frequently quotes experimental work, but is understandable to the layman. It contains many references.

1005129901

Source: https://www.industrydocuments.ucsf.edu/docs/hbnk0132

Stiles, C. W., & Altman, S. B. Snuff and tobacco: their use by school boys and girls in county Z. Public Health Reports, 1913, 28, 379-382, (Reprint 118).

PURPOSE

To determine the relation between habits of tobacco use and home environment.

SUBJECTS

A group of 96 boys and 83 girls, aged eight to eighteen years, in a county of a South Atlantic state.

METHOD

Analysis of records of tobacco use, taken in the course of a clinical study of hookworm diseases.

FINDINGS

There are proportionately more tobacco users among those children whose homes lack private toilet facilities. Moreover, these tobacco users tend to be chewers and snuff-dippers rather than smokers.

These findings are attributed to the folk belief that chewing and snuff-dipping are a preventive against anemia, and the custom of physicians in poor sections of the South to prescribe chewing and snuff-dipping as health measures.

100512902

Source: https://www.industrydocuments.ucsf.edu/docs/hhnk0000

Stiles, C. W., & Richard, D. N. Tobacco and snuff: their use by white school children in the city of X. Public Health Reports, 1915, 30, 2926-2928. (Reprint 301).

PURPOSE

To determine the relation between habits of tobacco use and home environment.

SUBJECTS

A group of 1043 boys and 1172 girls, aged four to twenty years, in the city of X.

METHOD

Students were asked whether they smoked, chewed, or snuff-dipped. Parents were almost always present and sometimes answered for their children.

FINDINGS

In the population studied, 92 percent of the boys and 99 percent of the girls denied using tobacco in any form.

COMMENTS

The findings have little meaning without differentiation by age. In any case, it is likely that the proportion of tobacco users is underestimated. The presence of the parents can be expected to have been an inhibiting force in reporting tobacco habits.

1005129903

Source: https://www.industrydocuments.ucsf.edu/docs/

Stoddard, Cora F. Smoking as a handicap to college students. Journal of Education (Boston), 1911, 74, 41-42.

This is a restatement of the study by Meylan (1910). Little is contributed beyond the original report.

1005129904

Source: https://www.industrydocuments.ucsf.edu/docs/hmkp0000

Study Group of the Public Health Department. The smoking habits of school children. Brit. J. Prev. & Soc. Med., 1959, 13, 1-4.

PURPOSE

To determine the smoking habits of English school children, so as to "serve as a basis for planning a more intensive search into the factors involved in the acquisition of the smoking habit by school children."

SUBJECTS

A group of 1797 male and 1682 female students in two grammar and four secondary modern schools in an industrial County Borough near London.

METHOD

Students filled out questionnaires in their classrooms. No attempt was made to obtain information from those absent from school, and incomplete questionnaires were rejected. Thus, analysis was done on the responses of 90 percent of the total school population.

FINDINGS

Smoking was more common among males than among females, among the older than among the younger, and among students at secondary modern schools than among those of the same age at grammar school.

Discussing intelligence the authors observe that "...over the age of 12 the proportion of boys who had smoked was consistently higher in the low stream" ($p < .10$).

COMMENTS

These figures cannot be held to be true for those who have left school, were absent from school at the time of the survey, or made errors or omissions in filling out the questionnaire. It is not clear from the writing whether intelligence refers to grades or to some other means of mental ability.

10051298905

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Taylor, C. K. The boy and the cigarette. Psychological Clinic, 1910, 4, 54-55.

PURPOSE

To determine the smoking habits of school boys and the relation of those habits to scholarship.

SUBJECTS

A group of 450 to 500 students at the Germantown Academy in Germantown, Pennsylvania.

METHOD

Unstated.

FINDINGS

The proportion of those who smoked increased with age, from fifteen per cent at twelve years to seventy-one per cent at seventeen years.

The average grade of the nonsmokers exceeded the average grade of the smokers by at least nine percentage points at all ages.

The investigator noticed that smokers tended to be tall and dull or short and bright, inferring that "smoking stunts 'something,' varying with the boy."

1005129906

Source: https://www.industrydocuments.ucsf.edu/docs/mmk0000

Taylor, C. K. A little more "truth about tobacco." Psychological Clinic, 1913, 7, 153-160.

PURPOSE

To report on the observed association between smoking and scholarship.

SUBJECTS

A group of 263 public school children, aged twelve years and older, in fifth to eighth grades.

METHOD

Analysis of smoking behavior vs. the age of the student relative to the modal age for students in his class.

FINDINGS

There were proportionately fewer smokers among those younger than their classmates, and proportionately more among those older.

Controlling for the age factor by comparing all twelve-year-olds, the investigator finds that there are no smokers among them in the eighth grade, but that the proportion of smokers among the twelve-year-olds increases from the seventh down to the fifth grade.

100512907

Source: https://www.industrydocuments.ucsf.edu/docs/xmnk0078

Tennant, R. B.
The American Cigarette Industry: A Study in Economic Analysis and Public Policy
New Haven: Yale Univ. Press, 1950 (xxvi & 411 pp.)

PURPOSE
To review the history of the American cigarette industry and to analyze its market structure and market behavior.

METHOD
Historical and economic techniques of analysis.

FINDINGS
Most relevant to social scientists is chapter 6: "The Demand for Cigarettes." This is a historical review and statistical analysis of demand. The author's conclusions are:

1. "The per capita consumption of all tobacco products taken together varies moderately over time in response to changes in taste, fashion and the national income." Growth in the last century is due largely to changes in taste and fashion.

2. In early years, some substitution of products on the basis of price incentives occurred in the purchase of cigarettes. During the period of acute depression, there was also a substitution of products. However, "in normal times there is no evidence of any price elasticity of demand."

3. Advertising does not seem to increase demand. "Market pressures are most effective in shifting the fringe of new or unsettled smokers."

COMMENTS
The detail on the history of the cigarette industry supplements other histories of smoking which tend to neglect recent trends and developments.

1005129908

Source: https://www.industrydocuments.ucsf.edu/docs/jnnk0000

Todd, G.F. Statistics of smoking (2nd edition). London: Tobacco Manufacturers' Standing Committee, 1959 (81 pp.)

PURPOSE

To provide statistics that may be useful in research on questions of smoking and health.

SUBJECTS

Data on smoking in the United Kingdom are based on a survey of 4,952 men and 5,549 women.

METHOD

The data on smoking in the United Kingdom were obtained in a survey in 1958 by Research Services, Ltd., using a quota sampling technique. Some data on smoking by juvenile males are based on a representative national survey by Market Investigations, Ltd.

The data regarding smoking in various countries were obtained from the United Nations Demographic Year-Book or the United Nations Monthly Bulletin of Statistics.

FINDINGS

The data on smoking in the United Kingdom are presented in terms of the following variables: (a) percentage of smokers and consumption per smoker; (b) packeted cigarettes, hand-rolled cigarettes, pipe tobacco, and cigars; (c) sex, age, residence, income, social class (occupation), and industrial groups. The findings in regard to the factors sex, age, and residence are similar to those in the United States (see Haenszel et al., 1956; Sackrin and Conover, 1957).

The data on smoking are presented for 30 other major countries, in terms of units or pounds of tobacco goods consumed per year.

COMMENTS

This seems to be the best source of data on tobacco consumption in the United Kingdom, and it is a very convenient source of data on consumption in a number of other countries.

1005129909

Source: https://www.industrydocuments.ucsf.edu/docs/pnnk0000

Todd, G.F., & Laws, J.T. The reliability of statements about smoking habits. London: Tobacco Manufacturers' Standing Committee, 1958.

PURPOSE

To investigate the nature of some of the errors in statements made by men and women about their current and past smoking habits.

SUBJECTS

Large nationwide samples in the United Kingdom in a series of surveys by Research Services Ltd.

METHOD

Comparison of results in surveys of smoking habits with known national aggregates of cigarette and tobacco consumption.

Comparison of statements regarding previous smoking habits with statements made at an earlier time.

FINDINGS

A person's statements about his current smoking habits usually describe the person's self-image of himself as a smoker. There is a tendency to underestimate one's level of consumption and to name the most fashionable or the most popular brands. Such inaccuracies do not, however, vitiate the results of surveys on large samples.

"Since there is . . . a considerable chance of a person's smoking habits changing in some respect before many years have passed, an individual's smoking habits at one time cannot necessarily be taken as accurately representing his or her smoking habits at another date or even as necessarily representing the average smoking habits over a period."

Changes in smoking habits generally take place at so slow a rate that reports of past consumption are more likely to be closer to current consumption than to the actual level in the past.

COMMENTS

This report can be useful to one evaluating survey results or planning to undertake an interview study of smoking habits.

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Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Troemel, R., Davis, R., & Hendly C. Dark adaptation as a function of caffiene and nicotine administration. Proc. S. Dakota Acad. Sci. 1951, 30, 79-84.

1005129911

Source: https://www.industrydocuments.ucsf.edu/docs/qmnk0000

Vallance, T. R. Suggestibility of smokers and nonsmokers. Psychol. Rec., 1940, 4 (10), 138-144.

PURPOSE

Smokers had reported in a preliminary study that they took up smoking because their friends were doing it, or because it seemed the smartest thing to do. This study attempts to determine the presence or absence of a relationship between tobacco smoking and "one measurable form of positive suggestibility."

SUBJECTS

Forty-seven male students from Miami University, all members of one fraternity, ages 17-24. Twenty-five were smokers.

METHOD

The Hull Postural Movement recorder was used with certain modifications to record sway in response to recorded suggestions.

FINDINGS

Nonsmokers were more positively suggestible than smokers.

COMMENTS

No tests of significance were used. Age and income were not controlled rigidly. Research should study the incidence of smoking as a function of social suggestibility, i.e. response to group pressure in experimental situations such as have been set up by Asch (see text).

1005129912

Source: https://www.industrydocuments.ucsf.edu/docs/jnnnk0000

Ward, P. G. Cigarette evil. Journal of Education (Boston), 1912, 75, 102.

In a polemic against smoking, a principal of grammar and high schools in Red Bluff, California stated: "Never, in those eighteen years, have I graduated a tobacco boy from the high school with sufficient credit to gain entrance to the State University. Not one of them has ever made any serious effort towards a higher education."

100529913

Source: https://www.industrydocuments.ucsf.edu/docs/...

Wechsler, R. L. Effects of cigarette smoking and intravenous nicotine on the human brain. Federation Proceedings, 1958, 17, 169. (Abstract of a paper given at the 1958 meetings of the American Physiological Society.)

PURPOSE

To determine the effects of nicotine on the metabolism of the human brain.

SUBJECTS

Ten subjects, aged 17-85 years, in the smoking phase; five male subjects, aged 19-22 years, in the injection phase.

METHOD

Cerebral circulation and metabolism were measured by the electroencephalogram and the nitrous oxide method. In the first phase, measurements were taken before, during, and after smoking three cigarettes during a ten minute period. In the second phase, measurements were taken before and during the last ten minutes of a thirty minute period of intravenous injection of 8 to 10 milligrams of nicotine.

FINDINGS

Under conditions of smoking, encephalograms revealed intermittent flattening patterns of 1/30 of a second duration, occurring with puffing of the cigarette. This pattern could be an attention response.

Side reactions, occurring with the injections of nicotine, make it difficult to attribute the observed significant increase ($p < .05$) in cerebral metabolism to nicotine.

1005129914

Source: https://www.industrydocuments.ucsf.edu/docs/fhmk0000

Whiskin, F. E. & Dibner, A. S. A report of a pilot study of the smoking behavior of age center members. Boston: Age Center of New England, Inc., 1959 (Unpublished).

PURPOSE

To "explore systematically the life-long smoking behavior of a group of apparently healthy, aging men and women."

SUBJECTS

A group of 174 males and 228 females over the age of 50, from a list of persons registered with the Age Center as "active and available" for research projects. These 402 subjects were those who responded to a ~~small~~ mail questionnaire sent to 595 individuals.

METHOD

Responses to a 40-item questionnaire were analyzed with the aid of demographic, personality and health data on the subjects available from the Age Center. MMPI data were available for 194 of the subjects, while medical data was available for 316.

FINDINGS

There were no significant differences between smokers and nonsmokers in regard to demographic, personality and health variables. There were some tendencies that might be relevant for future research: female smokers tended to score higher on Gough's Impulsivity Scale; smokers more frequently checked 'yes' items relating to the use of coffee and alcohol. Length of smoking, rate of smoking and manner of smoking seem to be more important factors than merely smoking or nonsmoking.

The majority of those who stopped or tried to stop smoking said that they had done so for health reasons.

There were several significant differences between inhalers and noninhalers. Inhalers tended to feel more tense while smoking (.02 level). Significantly more inhalers thought that smoking is more harmful to them than to those who do not inhale (.001 level). Inhalers are more likely to have tried to stop smoking than non-inhalers (.01 level). Inhalers begin to smoke earlier in life (.02)level).

Smokers were more likely than nonsmokers to have had fathers who smoked (.01 level for both males and females).

COMMENTS

This study is particularly valuable at this time, being the only one that investigates in detail the smoking habits of an elderly population.

It reports that 88% of the male and 55% of the female subjects had smoked at some time in their lives. These figures vary considerably from the corresponding percentages, 78% and 21% respectively, as extrapolated from the nationwide study by the Bureau of the Census (Haenszel et al., 1957, p. 57). In interpreting the implications of this study, it should be kept in mind that the Age Center population is probably not typical

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Source: https://www.industrydocuments.ucsf.edu/docs/nnak0000

of the population as a whole in this age range. They may be atypical, for example, in that they are volunteer subjects in a research project, that they are possibly more active than the average person of this age group.

Systematic observations between inhalers and noninhalers such as were made in this study are rare in the literature. Another reference to it is Earp's work (1931). It is conceivable that inhalers and non-inhalers may differ more than smokers and nonsmokers. In any event it seems that further studies of the characteristics of inhaling and noninhaling smokers are well worth doing.

100512916

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

Whitlow, C. W. The prevalence of smoking and drinking among high school pupils. School & Society, 1932, 36, 177-178.

PURPOSE

To determine the pattern of smoking and drinking habits among high school students.

SUBJECTS

A group of 612 students from a population of 750 in the high school of a small city in the Rocky Mountain region.

METHOD

Students anonymously filled out a questionnaire on smoking habits.

FINDINGS

Smoking was more common than drinking.

Males more frequently smoked and drank than did females.

"With respect to practice, the general tendency seems to indicate an increase of these particular behaviors in the upper grades."

Three-fourths of the pupils said that they believe that smoking was harmful, although one-half said that they smoked.

1005129917

Source: https://www.industrydocuments.ucsf.edu/tobacco/docs/

Whitlow, C. The prevalence of smoking and drinking among high school students. School and Soc., 1932, 36, 177-178.

SUBJECTS

Seven hundred and fifty subjects, both boys and girls.

METHOD

Questionnaire

FINDINGS

One third of the boys and two thirds of the girls said they never smoked. Three fourths of the pupils indicated that they believed smoking was harmful. Two thirds were of the opinion that girls have as much right to smoke as boys.

It is considered that the influence of the high school is negligible in relation to the practices of smoking and drinking.

ADAPTED FROM SECONDARY SOURCE:

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Source: https://www.industrydocuments.ucsf.edu/tobacco/docs/

Wolff, P. O. Sobre el tobaco y la costumbre de fumal (Tobacco and the custom of smoking). An. soc. cient. argent., 1947, 143, (I), 25-48.

ADAPTED FROM SECONDARY SOURCE

Psychol. Abstr.

100512919

Source: http://www.industrydocuments.ucsf.edu/docs/mmkc0000

Zulliger, H. "Psychoanalytic experiences in public school practice, II." (G. V. Swakhammer, Trans.). Amer. J. Orthopsychiat, 1940, 10, 595-609.

PURPOSE

To determine how smoking by children might be handled by psychoanalytically oriented educational techniques.

SUBJECTS

Fifth grade to ninth grade pupils in classes taught by the author.

METHOD

The author, as a Swiss schoolmaster, attempted to handle the problem of smoking by his pupils through psychoanalytically oriented methods. He compares his techniques to conventional punishment methods.

FINDINGS

The author treats childhood smoking as an attempt to emulate adult power and endeavors to break down this ideal.

Twenty-six accounts of how children began to smoke are presented.

COMMENTS

The report does not really describe an 'experiment' in the research sense; no records of smoking before and after 'treatment' are reported, nor are quantitative comparisons between Zulliger's methods and the 'conventional' methods possible. It does, however, suggest many possibilities for research on the origins of the smoking habit, and shows the effect of group pressure on smoking in children, with particular reference to the effect of the behavior of the group leader.

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Source: https://www.industrydocuments.ucsf.edu/docs/fmnk0000

Zulliger, H.; Psychoanalytic experiences in public school practice, II, (trans. by G.V. Swakhammer) Amer. J. Orthopsychiat., 1940, 10, 595-609.

This is a dramatic presentation of teacher-pupil discussions of smoking and an evaluation of different methods of handling the smoking problem in children. The usual basis for smoking in boys is the desire to be grown-up. This in itself is a good aim; it is the goal of education. We must not punish the smoker, we must not avoid the subject, we must not laugh it away. We must understand and sympathize with the pupil, and free him by letting the child be a child, regarding him as a goal in himself, and breaking down the ideal of grown-up power.

ADAPTED FROM SECONDARY SOURCE: Psychol. Abstr.

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Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

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Source: https://www.industrydocuments.ucsf.edu/docs/hmkf0000

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1005129948

Source: https://www.industrydocuments.ucsf.edu/docs/ajnh0000

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1005129949

Source: https://www.industrydocuments.ucsf.edu/docs/mnkx0095

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1005129950

Source: https://www.industrydocuments.ucsf.edu/docs/

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100512951

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". . . the decisive factor in the effects of tobacco, desired or undesired, is nicotine..."

Source: https://www.industrydocuments.ucsf.edu/docs/nfbm0000

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2051299S2

Source: https://www.industrydocuments.ucsf.edu/docs/mmkc0000

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Source: https://www.industrydocuments.ucsf.edu/docs/mmp0000

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1005129954

Source: https://www.industrydocuments.ucsf.edu/docs/mmk0000

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100129955

Source: https://www.industrydocuments.ucsf.edu/docs/fmk00000

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1005129956

Source: https://www.industrydocuments.ucsf.edu/docs/nnnk0000

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1005129957

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100512958

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

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1005129960

Source: https://www.industrydocuments.ucsf.edu/docs/amkc0000

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1005129961

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100512962

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Source: https://www.industrydocuments.ucsf.edu/docs/hmkb0000

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100512968

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100512970

Source: https://www.industrydocuments.ucsf.edu/docs/nmkf0000

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1005129972

Source: https://www.industrydocuments.ucsf.edu/docs/mwlf0000

Smokers among sixth grade boys, Pittsburgh School Bulletin, September 1909, 3, 4-5.

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2005129973

Source: https://www.industrydocuments.ucsf.edu/tobacco/

"The Fortune Survey"
Fortune (July 1935) 12:1:68ff

PURPOSE

To determine the size of the market for cigarettes.

SUBJECTS

Not reported.

METHOD

Not reported.

FINDINGS

The survey finds that more males than females smoke cigarettes, that a larger proportion of those under 40 years of age smoke cigarettes than of those over 40, and that there is a larger proportion of smokers in urban than in rural areas. The statistics seem to indicate clearly that the greatest concentration of cigarette smokers is to be found in cities with a population of 100 thousand to 1 million. [This finding is not supported by later government studies (U.S. National Resources Committee, 1941; U.S. Bureau of Labor Statistics, 1941; Haenzel et al., 1956; Sackrin and Conover, 1957).] The writers say that their finding suggests the view that persons in small population centers tend to follow the smoking habits of those in large population centers.

COMMENTS

The statistics in this study tend to conform to trends noted in later studies, but the figures themselves tend to be exaggerated when one takes the later studies as a standard. In the absence of details on the subjects and the survey method used, it is hard to evaluate the ~~reliability~~ validity of the study.

2005129924

Source: https://www.industrydocuments.ucsf.edu/docs/jnmk0000

"How Critical Are Men of Women Who Smoke and Drink?"
Sales Management (September 15, 1937) 41:364

also
"Survey Shows Drinking by Women Is More General than Smoking"
Sales Management (September 1, 1937) 41:30+

PURPOSE

A study by the Market Research Corporation, for Sales Management, to compare opinions on drinking and smoking by women.

SUBJECTS

A sample of 250 men and 250 women on streets in the shopping areas in Cleveland, Seattle, Asheville, and New York.

METHOD

Subjects were interviewed regarding their smoking and drinking habits and their opinions about drinking and smoking by women in public places.

FINDINGS

The findings regarding smoking and drinking habits are presented in this table:

Do you smoke?	Men	Women
Regularly	69%	26%
Occasionally	11%	23%
Never/Almost Never	20%	51%

Do you drink?	Men	Women
Yes	76%	60%
No	24%	40%

While 28% of the men and 18% of the women thought that smoking by a woman on a street was acceptable behavior, 40% of the men and 11% of the women thought that drinking in a bar by a woman was acceptable behavior.

COMMENTS

The sampling method used in this study is such that the findings cannot be extrapolated to the general population. Moreover, there is lack of specificity in the report regarding the meanings of the words "regularly" and "occasionally," used as categories of response to the question "Do you smoke?"

2005129975

Source: https://www.industrydocuments.ucsf.edu/docs/mkb0000

Social Research, Inc.
Cigarettes: Their Role and Function
Chicago: Chicago Tribune, 1952

PURPOSE

The research was performed by Social Research, Inc., on behalf of the Chicago Tribune, to inquire why people smoke cigarettes and why they smoke the brand of cigarettes they do.

SUBJECTS

Not reported.

METHOD

Not reported. Some sort of interview study was apparently conducted.

FINDINGS

Among the popular conceptions of cigarettes and cigarette smoking, the authors note: cigarettes are an evil (i.e., immoral, wasteful, unhealthy, dangerous, dirty, habit forming); cigarette smoking means energy, activity, and accomplishment; and cigarette smoking relieves tension.

Among the personal meanings associated with cigarettes and cigarette smoking, the authors note: handling a cigarette is satisfying (through repetitive mechanical activity between fingers and lips, through the ritual of "taking out and lighting up," through "a feeling of security in following an orderly process," through sensations, through the discharge of "nervous" energy, through the expression of aggression); oral indulgence; the "perverse pleasure" of self-defeating behavior (associated with the popular conceptions of cigarettes as an evil); proof of manliness; possessiveness (manifested in brand loyalty); an expression of maturity, daring, freedom, poise, sophistication, and exhibitionism.

Among the social meanings associated with cigarettes, the authors note: sociability; tobacco as currency; affiliation and friendship; social ritual; conformity; initiation (from adolescence to adulthood).

Comments on cigarette stereotypes, factors in brand selection, and cigarette advertising have now been rendered 'out of date' by changes in the industry.

The authors observe that, although teenagers tend to attribute their own brand preference to taste, advertising, or the influence of other teenagers, it often appears to be related to parental brand preference.

COMMENTS

In the absence of information on the methods used, it is better to accept the findings of the researchers as suggestive rather than conclusive. The ideas presented may be useful to anyone doing research on why people smoke.

1005129976

Source: https://www.industrydocuments.ucsf.edu/docs/hmm0000

"Smokers May Have Neurotic Tendencies, Buffalo Study Shows"
Advertising Age (August 4, 1958) 29:24

PURPOSE

Research by Dr. Abraham M. Lilienfeld of the Roswell Park Memorial Institute, under a grant by the National Cancer Institute, to determine whether there is a relationship between smoking and neurotic tendencies.

SUBJECTS

From 4,456 adults in Buffalo and Kenmore, a group of 903 smokers and another group of 903 nonsmokers were formed, matched for age, sex, race and social status.

METHOD

Data on marital status, employment, hospitalization, and mobility were obtained by interview. Each subject answered a questionnaire of 31 questions.

FINDINGS

16 answers by the smokers were "significantly different"-- "excessive in the direction that might be considered neurotic."

The researcher speculates on three possible causal relationships: (a) smoking induces neuroticism, (b) neuroticism induces smoking, and (c) an undetermined factor induces both smoking and neuroticism. He commits himself to none of these positions.

COMMENTS

This report of the research has insufficient detail to be of great use.

1005129977

Source: https://www.industrydocuments.ucsf.edu/docs/

"Survey Shows Drinking by Women Is More General Than Smoking"
Sales Management (September 1, 1937) 41:304

see

"How Critical Are Men of Women Who Smoke and Drink?"
Sales Management (September 15, 1937) 41:364

10051299978

Source: https://www.industrydocuments.ucsf.edu/docs/[illegible]

U. S. National Resources Committee
Family Expenditures in the United States
Washington: U. S. Government Printing Office, 1941

PURPOSE

To provide estimates of average and aggregate expenditures for over 10 categories of tobacco consumption, comparing urban-rural differences, differences in income level, regional variations, and differences with respect to size of family and race. It is based on data from the Study of Consumer Purchases, a survey by the Department of Agriculture and the Department of Labor.

SUBJECTS

More than 60,000 native-born, white, American families. A small sample of Negro families was included for comparison purposes.

METHOD

The data were collected by interview in 1936 for a 12-month period in 1935-1936. Random and controlled sampling procedures were used.

FINDINGS

Data on tobacco expenditures are given in terms of "cigarettes," "other tobacco," and "total." The category of "other tobacco" includes cigars, pipe tobacco, chewing tobacco, snuff, and also pipes, pipe cleaners, humidors, pouches, lighters, matches, ashtrays, and other smokers' supplies.

The tables relevant to tobacco expenditures are: 16, 38, 72, 79, 92, 127, 133, 143, 159, 176, 193, 206, 231, 248, 259, 270, 352, 357, 370, 384, 398, and 412.

The variables used for comparative purposes are (a) income level, (b) farm, rural nonfarm, and urban, (c) region, and (d) relief-nonrelief familes.

Interpretation of the data on tobacco expenditures is not provided.

COMMENTS

The residual category of "other tobacco" makes comparison with cigarette consumption difficult.

Averages for any item may include all families in the category, including those which made no expenditure for tobacco whatsoever.

This study and its companion study (U. S. Bureau of Labor Statistics, 1941) provide the best data available on patterns of tobacco consumption in the 1930's.

100512979

Source: https://www.industrydocuments.ucsf.edu/tobacco

U. S. Bureau of Labor Statistics
Family Expenditures in Selected Cities, 1935-1936 (Bulletin No. 648)
"Recreation, Reading, Formal Education, Tobacco, Contributions, and Personal Taxes" (volume VII)
Washington: U. S. Government Printing Office, 1941

PURPOSE

To present data from the Study of Consumer Purchases, a survey by the Department of Agriculture and the Department of Labor.

SUBJECTS

More than 60,000 native-born, white, American Families. A small sample of Negro families was included for comparison purposes.

METHOD

The data were collected by interview for a 12-month period in 1935-1936. Random and controlled sampling procedures were used.

FINDINGS

The following observations are reported in the text:

1. Total expenditures for tobacco vary little from city to city within income classes.
2. White families tend to spend more for tobacco than do Negro families in the same city.
3. The proportion of families reporting tobacco expenditures was highest in New York, Chicago, and Providence; it was lowest in Portland, Oregon.
4. Cigarette purchases increase with increase in income.

The tables present data on the percentage of families reporting expenditure for "cigarettes," "cigars," "other tobacco," "smokers' supplies," and "total," the average amount of such expenditure, and the average quantity of cigarettes and cigars purchased weekly. The data are arranged by income classes in New York (white and Negro), Chicago, Providence, Columbus (white and Negro), Atlanta (white and Negro), Omaha-Council Bluffs, Denver, Portland, and 25 smaller cities grouped by region.

COMMENTS

Averages for any item may include all families in the category, including those which made no expenditure for tobacco whatsoever.

Limitation of the population to "native-born" families may give improper estimates of tobacco consumption in large immigrant centers like New York.

This study and its companion study (U. S. National Resources Committee, 1941) provide the best data available on patterns of tobacco consumption in the 1930's.

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Source: https://www.industrydocuments.ucsf.edu/docs/nnnk0000